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## A Series of Case Studies in Financial Reporting

Nicholas Fenske

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A SERIES OF CASE STUDIES IN FINANCIAL REPORTING

by  
Nicholas Fenske

A thesis submitted to the faculty of The University of Mississippi in partial fulfillment of  
the requirements of the Sally McDonnell Barksdale Honors College.

Oxford  
May 2020

Approved by

A handwritten signature in black ink that reads "Victoria Dickinson". The signature is fluid and cursive, with the first name and last name clearly distinguishable.

---

Advisor: Dr. Victoria Dickinson

A handwritten signature in blue ink that reads "W. Mark Wilder". The signature is cursive and stylized, with the first letters of the first and last names being capitalized and prominent.

---

Reader: Dr. W. Mark Wilder

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## **Dedications**

This thesis is dedicated to everyone, my parents especially, whose hard work has allowed me to reach this (literal) capstone achievement. I honestly could not have done it without any of you, so thank you.

Also, sincere thanks to this dedications page for bringing the total number of pages in this document to an even 150. That was wholly necessary for my sanity.

## **Abstract**

The Sally McDonnell Barksdale Honors College and the Patterson School of Accountancy allow honors accounting students an “alternate route” for fulfillment of their thesis requirement. A structured class is held, with a series of twelve case studies assigned over the course of two semesters. The content of the case studies varies, but each involves a final product consisting of a thorough analysis and response relevant to the topic at hand. On other weeks, we hear from invited accounting professionals; and in lieu of a traditional defense, we participate in two separate case competitions which require intense team preparations and presentations.

In order to allow students to participate in spring internships during their senior year, the accountancy alternate route thesis is fully completed by the end of junior year. Looking back now on work I completed one year ago, I can clearly articulate overarching takeaways from the course, such as how the case studies, guest speaker presentations, and case competitions all combined to give me a well-rounded accounting education beyond what can be obtained in the traditional classroom. I feel like these insights have given me a leg up in both understanding and opportunities, and for that I am grateful.

For articulation of my real-time impressions of the class, I have included within this document the original abstracts written to accompany each individual case study. Combined, these abstracts should serve to demonstrate the knowledge, and appreciation thereof, which I have gained over the course of my capstone experience.

One might be surprised to discover that each case is not devoted wholly to number-crunching, and in fact certain cases involve no numbers at all. The benefits of this course are wide-ranging – the cases have taught me how to enhance my critical thinking skills as they apply to accounting, shown me how the concepts I have learned in the classroom are applied in the “real world,” and even helped me come to key realizations concerning my immediate future within the accounting profession following graduation. I am certain that my takeaways from this class will be an invaluable resource as I begin my career.

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## CASE STUDY 1 – DATA ANALYTICS

by  
Nicholas Fenske

September 5, 2018



## **Abstract**

The purpose of this case study was to investigate data analytics tools commonly and/or increasingly used in the accounting profession. Our class was split up into teams, and each team was assigned a different tool (our team's was Alteryx). From there, we were to research our assigned tool to learn more about what it does and how it helps influence business decisions in general, as well as brainstorm several different scenarios in which the tool could be used in the auditing and tax planning fields of accounting specifically. Teams were encouraged to work together on the research and brainstorming aspects of the case, but – as with every case study – each team member created his or her own write-up individually. The write-ups presented each of us with the additional task of writing a memo in the persona of a new associate of an accounting firm to a partner of the firm, encouraging them to adopt the data analytics tool for the firm and explaining why.

I believe this case study will greatly inform my future career. For one thing, going into this case, I barely had a clue what data analytics was. Even with all of the research our team completed, I don't believe any of us has become completely versed in the topic, but at least now we all have a better understanding of its functions and uses. Similarly, the question of “audit or tax?” is one that looms over us, but few of us have a clear idea yet of which field to choose. This case helped enlighten me on some of the different roles that an accountant in each field might serve, as well as how Alteryx can help enhance those roles. In short, I have a lot left to learn, but this case is a welcome starting point.

**1-1. Identify the purpose of this tool and describe, in general, how it is used to make business decisions.**

Alteryx is a data analytics tool designed to simplify both the time and effort required in manually processing, combining, and interpreting datasets, especially those that are large and complex. In fulfilling this purpose, Alteryx offers its users a variety of different platforms under its core brand, including (but not limited to) Alteryx Connect, Alteryx Designer, Alteryx Server, and Alteryx Analytics Gallery. Each of these programs performs specific functions that can considerably aid business professionals in completing the tasks that they are expected to carry out.

To put something complex into extremely simplified terms, Alteryx can perform numerous operations on multiple sets of data, and all of these operations can inform business decisions. For instance, at the very front end of data analytics, the datasets of interest must be inputted into whatever software is being utilized. Even at this stage, Alteryx stands out because it can blend data from any number of data sources, including, say, an Excel document and a Twitter feed. Moreover, this data can be qualitative or quantitative; the ability to combine these different styles of data into one arena for analysis purposes greatly enhances the size and content of the bank from which the business professional may draw information pertinent to his or her decision-making process.

Better yet, the professional can have Alteryx itself manipulate the data for him or her, teasing out relevant aspects while muting the irrelevant, modeling the data for visualization purposes, and – assuming the task is one that must be performed regularly – even automating the process, to where Alteryx will repeat the designated action as many times or as frequently as necessary. Once all of this is complete, Alteryx also offers the capability to export its findings into other file types for further distribution and communication throughout the organization.

Generally speaking, a multitude of information and analyses can be gleaned via all of these processes, significantly more in a shorter period of time than could be produced by manually sorting through heaps of data. In short, whatever the business decision may be, Alteryx provides professionals a world of help in coming up with solutions through its ability to blend, manipulate, and automate actions on relevant sets of data.

**1-2. How, specifically, would you use the tool in the following business settings?**

**Create at least three specific scenarios for each category in which the tool would lead to more efficiency and/or better effectiveness. Be sure to describe what kinds of data your tool would use for each scenario.**

**a) Auditing**

- i. Given our standing as an accounting firm with multiple clients spread across a number of different industries, Alteryx could be useful in creating singular databases for each industry we serve, such that the financial statements – past and present – of all of our clients within that industry would be grouped together for both organization (i.e., classification) and analysis

purposes. This would allow for greater efficiency within our firm by virtue of compartmentalizing, so to speak, the records from each industry we serve into one designated spot. Moreover, we would have the ability to compare, with more ease than ever, the financial statements of different clients within a given industry, as well as the same client over multiple years.

To explain further, in this example Alteryx would aid our audits of these clients by manipulating each client's financial statement data to where the software would locate both trends and inconsistencies in the statements from all of our clients within that industry. From there, we would have a starting point from which to investigate these inconsistencies further, to determine if the numbers are indeed legitimate outliers compared to the rest of the industry, or if they stem from a larger reporting error. Similarly, we would have the ability to use Alteryx to measure the degree to which an individual client has been consistent or inconsistent in their financial reporting over past periods; and in both scenarios, Alteryx would enable our auditing team to pinpoint the root of the issue and subsequently inform our clients of any necessary corrections to be made.

- ii. The Financial Accounting Standards Board (FASB) has been known to make changes to Generally Accepted Accounting Principles (GAAP). In some (if not all) cases, these changes must be retroactively applied to all past financial statements of a company. As auditors, not only must we assist our clients in making these changes, we must also re-audit all of the newly-affected statements in order to once again ensure their accuracy. This has all

the makings of an extremely tedious process, but Alteryx can substantially simplify the effort we must expend in performing these actions. First of all, instead of having to dig through years upon years of past records, Alteryx will already have our clients' past financial statements stored within its database. From here, assuming the change in principle is simple enough to apply as a condition within the software, we can enact Alteryx's "repeatable workflow" function such that the program itself goes back through the past statements and makes the necessary adjustments.

Alternatively, rather than a change in accounting principle, perhaps an error is discovered in one client's reporting in 2018 that, it turns out, has gone undiscovered since 2014, and has carried over on the company's financial statements for every year in-between. This error compromises the accuracy of all of the affected statements, going back a number of years. With this same "repeatable workflow" function, Alteryx should be able to go through and alter the data on those past financial statements, correcting the error as well as any and all other balances or figures that the error may have tainted. Again, this takes the burden off of our shoulders as audit professionals by ceding to Alteryx the ability to identify solutions and modify the data in these scenarios.

- iii. Similar to the previous example, assume one of our clients wishes to enact a voluntary change in accounting principle, such as switching between FIFO and LIFO, or from straight-line depreciation to double declining balance. Before committing to this change, however, the client would like our help as auditors to determine what effect this change would have on their financials,

as well as whether or not the new method is one used widely within their industry.

As to the latter, Alteryx can quickly and easily analyze the financial statements of fellow clients within the same industry – which, remember, would all be stored within Alteryx’s databanks – to determine the degree to which the desired method is or is not used by the client’s competitors. And for the former, we could have Alteryx perform predictive analysis – based on the client’s previous records – contrasting the desired method to the existing method, to investigate what changes would result in the company’s financial standing and reporting. Alteryx’s speed in completing these tasks would allow us to get back to our client in a much quicker fashion than ever before, and might even be enough to encourage or convince us to create an advisory department, in addition to our audit and tax teams.

## **b) Tax Planning**

- i. As opposed to our auditing department, which ensures the accuracy of financial statements reporting past transactions and events, our tax planning department focuses more on helping our clients look forward, examining different scenarios and how those scenarios will affect their future tax liability.

As mentioned previously, Alteryx has a predictive analytics function. This function would be immensely helpful in accomplishing the aforementioned task. For example, say a client would like to reach a specified target net

income, or advertising expense, or some other amount that they would like to either increase or decrease. With Alteryx, we would be able to manipulate their past data to predict their future data, using the target figure in the specified account as a basis for the predictive analysis. In the example of the target net income, for instance, Alteryx could tell us what level of sales would be needed to achieve that goal. On top of this, with the right data, Alteryx could even go further and analyze which of the client's locations would be most likely to generate what percentage of these sales.

Ultimately, adjusting different accounts would allow us to analyze what effect the desired target figure, as well as any other potential, controllable changes to the rest of the client's accounts, would have on their tax payment – which, of course, we want to help the client minimize.

- ii. Some of our clients post net losses for a given period or year; that is unavoidable. Oftentimes, these clients want our help as tax accountants in deferring these losses over previous or forthcoming years. With Alteryx, we could easily help analyze and determine how the overall taxes for our client would change. Based on the carryback and carryforward provisions, net losses can be offset against net profits in other reporting periods. Specifically, if the client wishes to do a loss carryback, the client's previous period(s) would have to be adjusted, and their taxes recomputed. Rather than having to do these adjustments manually, Alteryx could perform the operation with ease.

Alternatively, say the client would rather carry the loss forward. With the aforementioned predictive analytics feature, Alteryx could create sample

future financial statements based on the client's past data, and manipulate certain aspects of the predictive statements to see how different projected net profit amounts would impact the plan to carry the net loss forward; whether carryback, carryforward, or a combination of the two would be better overall; etc. In short, Alteryx can help us secure for our clients the biggest refunds and the lowest future tax liabilities as possible, given the challenge of carrying back or forward a net loss.

- iii. Finally, one additional tax application of Alteryx involves managerial decision-making. Managers working for our clients are constantly faced with decisions on whether to buy or sell a fixed asset, run a special order, close a branch or division of their company, discontinue a product line, etc. With access to their data pertaining to the decision at hand, we could, through Alteryx, help them examine the different outcomes of any of these possible scenarios, and how one decision or the other would affect not only their taxes, but also their expenses, revenues, and other accounts contributing to the bottom line.

Furthermore, for decisions not strictly involving monetary figures – e.g., making a limited edition item a permanent addition to the client's portfolio of products – Alteryx can also compile and analyze nonnumeric elements such as consumer feedback (say, social media posts from users saying they love the item and pushing for it to be made permanent, versus those who are negative or neutral in their opinions). From there, we would present our Alteryx



findings to the client so that they can weigh the bearings of that information on their decision further.

Profitability – past or predicted – is another key measure that Alteryx can analyze, especially insofar as a decision on restructuring divisions is concerned; we would want to ensure that the new arrangement would not be adversely affected by increased taxes cutting into that profitability, and Alteryx can help us do that.

- 1-3. Write a few paragraphs to your future public accounting partner explaining why your team should invest in the acquisition of and training in this tool. Explain how the tool will impact the staffing and scope of your future engagements.**

**To:** Partner

**Memorandum**

**From:** Nicholas Fenske, Associate

**Date:** September 5, 2018

**Re:** Data Analytics – Alteryx

“Data analytics is the way of the future.” We hear that a lot, but it’s true. If we want to stay on top of things, keep our existing clients and gain the capability to add new ones, and get a leg up on other, competing firms, then I fully believe that we should really consider investing in Alteryx. Alteryx is a software program that offers several different platforms for processing and analyzing data. It also simplifies access to large swaths of

data. But beyond all of its technical features, Alteryx can provide us with even more benefits.

First of all, Alteryx has the ability to store and blend data from various sources. We could have all of our clients' past financial statements in one place. Better yet, the data can be more than just numeric. We could have all relevant data pertaining to a single client in a single designated space! From there, we could also organize our clients by industry. Likewise, we could organize ourselves. Alteryx would be the common platform for all of our firm's locations. We could have much greater efficiency and collaboration with the ability to access the same data on Alteryx in our Memphis office as in our New York office.

Alteryx also is simple and easy to use. The interface is point-click-done. There is no need to hire out-of-pocket data analytics professionals for us to use this software; Alteryx is not based on code. We will be fine keeping our staff the way it is. Of course, we will have to invest in training for all of our staff... but the Alteryx platform makes transforming data into visualizations so simple that we shouldn't have to worry about it being too complicated to understand, and as a result, training should be minimal.

Lastly, consider this: Alteryx has, among many others, a process called "repeatable workflow." All of that manual effort spent copying and pasting items? Alteryx can do all that for us! The more work we can have Alteryx do, the more time freed up for our employees to complete other tasks. We can get things done quicker than ever before. Additionally, we would have the capacity to take on additional clients, without overloading our existing staff or having to hire new staff. Alteryx would allow us to function as if we had expanded, without actually having to do so. It would give us the

data processing capability that we need, and best of all, it would give us an edge over our competitors. I am convinced that not just data analytics in general, but Alteryx specifically is the way of our future. I hope I've persuaded you to examine this highly beneficial option for our firm's next big step in greater detail.

Thank you for your time,

Nicholas Fenske

CASE STUDY 2 – ROCKY MOUNTAIN CHOCOLATE FACTORY, INC.

by  
Nicholas Fenske

September 12, 2018

## **Abstract**

This case study was, put plainly, all about Excel. To be sure, there was plenty of additional work to be done as well; most notably, this case provided our introduction to case studies in which we will be working with real figures and financial statements from real companies – auditing them, presenting them, interpreting them. But there is no doubt that Excel was the star of the show. Upon analyzing the financials of Rocky Mountain Chocolate Factory, Inc. and creating journal entries for the given transactions, our major task was to input the numbers we arrived at into Excel, and from there, get Excel to do much of the work for us, by devising formulas through which Excel would calculate the desired totals from the selected cells. In addition, we were to create both a balance sheet and an income statement for the company based off of the totals that Excel calculated; this task in particular was designed to have us explore formatting techniques in Excel.

It seems a little premature to be saying this, but I think that this case may well be the one that benefits me the most out of all of our case studies in this course. I know that Excel, as a software that I will be expected to use not only proficiently, but with a near-expert status in the future, is a key skill in the field of accounting. Despite this fact, however, very little in the way of Excel has been taught in any of my classes so far; in fact, this class is the first in which I have had an assignment working to this extent with the embedded features of the program. As such, I am grateful for the opportunity and will continue to seek to become better versed in Excel's many functions and applications.

**2-1. Prior to examining the company’s actual balance sheet, read the description of Rocky Mountain Chocolate Factory. What accounts do you expect to see on the balance sheet? Which accounts constitute the major assets? Which accounts constitute the major liabilities?**

I would expect to see assets including (but not limited to) Cash; Accounts Receivable; Supplies; Inventory; Property, Plant, and Equipment; and Prepaid Insurance. Similarly, liabilities I would expect to see include Accounts Payable, Unearned Revenue, and Notes Payable, among others. These would all appear on the balance sheet, in addition to equity accounts such as Common Stock and Retained Earnings.

**2-2. Prepare journal entries, as needed, for the listed fiscal 2010 “transactions.” All figures are in thousands of dollars. Post the journal entries for the transactions to the spreadsheet. Prepare an unadjusted trial balance from the spreadsheet.**

Please refer to Table 2-1.

- 2-3. Based on the transactions you recorded in Section 2-2, list at least three adjustments or reclassifications that might need to be made prior to preparing the final financial statements.**

Adjusting entries that I expect would need to be made are as follows: 1) adjust the deferred income liability so as to recognize revenue for this period; 2) recognize additional accrued liabilities, such as salaries and wages; and 3) depreciate the Property, Plant, and Equipment account.

- 2-4. Prepare journal entries for the listed adjustments. Post the journal entries for the adjustments to the spreadsheet and complete the pre-closing trial balance column.**

Please refer to Table 2-2.

- 2-5. Construct an income statement for the year ended February 28, 2010. Use the headings from your spreadsheet rows as the account titles.**

Please refer to Table 2-3.

- 2-6. Close all the temporary accounts on the income statement to Retained Earnings. Complete the post-closing (ending) balance column. Verify that the amounts for the balance sheet accounts in the post-closing balance column match the amounts in the actual February 28, 2010 financial statement column.**

Please refer to Table 2-4.

- 2-7. Prepare the February 28, 2010, balance sheet. Use the headings from your spreadsheet rows as the account titles.**

Please refer to Table 2-5.

- 2-8. For each transaction, indicate whether the transaction would appear in the “operating,” “investing,” or “financing” section of the statement of cash flows.**

Please refer to Table 2-6.



### Table 2-1. Journal Entries and Unadjusted Trial Balance

		Beginning balance (February 28, 2009)	1. Purchase inventory	2. Incur factory wages	3. Sell inventory for cash and on account	4. Pay for inventory	5. Collect receivables	6. Incur SG&A (cash and payable)	7. Pay wages	8. Receive franchise fee	9. Purchase PPE	10. Dividends declared and paid	11. All other transactions	Unadjusted trial balance	
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Dr:	Cash and cash equivalents														
	Accounts receivable	1,253,947			17,000,000	5,000,000	\$4,100,000	\$ (2,000,000)	\$ (6,423,789)	\$ 125,000	\$ (498,832)	\$ (2,403,458)	\$ 790,224	\$ 3,743,092	
	Notes receivable, current	4,229,733					(4,100,000)						(702,207)	4,427,526	
	Inventories	-											91,059	91,059	
	Deferred income taxes	4,064,611	\$7,500,000	\$ 6,000,000	(14,000,000)								(66,328)	3,498,283	
	Other	369,197											92,052	461,249	
	Property and equipment, net	224,378											(4,215)	220,163	
	Notes receivable, less current portion	5,253,598									498,832		132,859	5,885,289	
	Goodwill, net	124,452												124,452	124,452
	Intangible assets, net	1,046,944												1,046,944	1,046,944
Cr:	Other	183,135											(73,110)	110,025	110,025
	Accounts payable	91,057	7,500,000	6,000,000		(8,200,000)			(6,423,789)				(3,007)	88,050	88,050
	Accrued salaries and wages	1,074,643											503,189	877,832	877,832
	Other accrued expenses	423,789											(2,885,413)	946,528	946,528
	Dividend payable	531,941						3,300,000				3,709	(1)	602,694	602,694
	Deferred income	598,986								125,000		(46,062)	220,938	220,938	
	Deferred income taxes	142,000											66,729	894,429	894,429
	Common stock	827,700											1,112	180,808	180,808
	Additional paid-in capital	179,696											315,322	7,626,602	7,626,602
	Retained earnings	7,311,280										(2,407,167)		3,343,850	3,343,850
Dr:	Sales	5,751,017											944,017	22,944,017	22,944,017
	Franchise and royalty fees	-	-	-	22,000,000								5,492,531	5,492,531	5,492,531
	Cost of sales	-	-	-									693,786	14,693,786	14,693,786
	Franchise costs	-	-	-	14,000,000								1,499,477	1,499,477	1,499,477
	Sales and marketing	-	-	-									1,505,431	1,505,431	1,505,431
	General and administrative	-	-	-									(261,622)	1,782,947	1,782,947
	Retail operating	-	-	-										1,750,000	1,750,000
	Depreciation and amortization	-	-	-										-	-
	Interest income	-	-	-									(27,210)	(27,210)	(27,210)
	Income tax expense	-	-	-									2,090,468	2,090,468	2,090,468

**Table 2-2. Adjusting Entries and Pre-Closing Trial Balance**

		Unadjusted trial balance	12. Adjust for inventory count	13. Record depreciation	14. Wage accrual	15. Consultant's report	Pre-closing trial balance
Dr.	Cash and cash equivalents	\$ 3,743,092					\$ 3,743,092
	Accounts receivable	4,427,526					4,427,526
	Notes receivable, current	91,059					91,059
	Inventories	3,498,283	\$ (216,836)				3,281,447
	Deferred income taxes	461,249					461,249
	Other	220,163					220,163
	Property and equipment, net	5,885,289		\$ (698,580)			5,186,709
	Notes receivable, less current portion	263,650					263,650
	Goodwill, net	1,046,944					1,046,944
	Intangible assets, net	110,025					110,025
	Other	88,050					88,050
Cr.	Accounts payable	877,832					877,832
	Accrued salaries and wages	-			\$ 646,156		646,156
	Other accrued expenses	946,528					946,528
	Dividend payable	602,694					602,694
	Deferred income	220,938					220,938
	Deferred income taxes	894,429					894,429
	Common stock	180,808					180,808
	Additional paid-in capital	7,626,602					7,626,602
	Retained earnings	3,343,850					3,343,850
	Sales	22,944,017					22,944,017
	Franchise and royalty fees	5,492,531					5,492,531
Dr.	Cost of sales	14,693,786	216,836				14,910,622
	Franchise costs	1,499,477					1,499,477
	Sales and marketing	1,505,431					1,505,431
	General and administrative	1,782,947			639,200		2,422,147
	Retail operating	1,750,000			6,956		1,756,956
	Depreciation and amortization	-		698,580			698,580
	Interest income	(27,210)					(27,210)
	Income tax expense	2,090,468					2,090,468

**Table 2-3. Income Statement**

<b>Rocky Mountain Chocolate Factory, Inc.</b> <b>Income Statement</b> <b>For the Year Ended February 28, 2010</b>		
<b>Revenues</b>		
Sales	\$ 22,944,017	
Cost of sales	<u>14,910,622</u>	
Net Sales Revenue		\$ 8,033,395
Franchise and royalty fees	5,492,531	
Franchise costs	<u>1,499,477</u>	
Net Franchise Revenue		<u>3,993,054</u>
<b>Gross Profit</b>		\$ 12,026,449
<b>Expenses</b>		
Sales and marketing	1,505,431	
General and administrative	2,422,147	
Retail operating	1,756,956	
Depreciation and amortization	<u>698,580</u>	
Total Expenses		<u>6,383,114</u>
<b>Income from Operations</b>		\$ 5,643,335
<b>Other Revenues and Expenses</b>		
Interest income		<u>27,210</u>
<b>Income Before Income Tax</b>		\$ 5,670,545
<b>Income Tax Expense</b>		<u>2,090,468</u>
<b>Net Income</b>		<u>\$ 3,580,077</u>
<b>EPS (5,989,858 common shares outstanding)</b>		<u>\$ 0.60</u>

**Table 2-4.** Closing Entries and Post-Closing (Ending) Balances

		Pre-closing trial balance	16. Closing entry	Post-closing (ending) balance	Actual February 28, 2010 F/S figures
Dr.	Cash and cash equivalents	\$ 3,743,092		\$ 3,743,092	\$ 3,743,092
	Accounts receivable	4,427,526		4,427,526	4,427,526
	Notes receivable, current	91,059		91,059	91,059
	Inventories	3,281,447		3,281,447	3,281,447
	Deferred income taxes	461,249		461,249	461,249
	Other	220,163		220,163	220,163
	Property and equipment, net	5,186,709		5,186,709	5,186,709
	Notes receivable, less current portion	263,650		263,650	263,650
	Goodwill, net	1,046,944		1,046,944	1,046,944
	Intangible assets, net	110,025		110,025	110,025
	Other	88,050		88,050	88,050
Cr.	Accounts payable	877,832		877,832	877,832
	Accrued salaries and wages	646,156		646,156	646,156
	Other accrued expenses	946,528		946,528	946,528
	Dividend payable	602,694		602,694	602,694
	Deferred income	220,938		220,938	220,938
	Deferred income taxes	894,429		894,429	894,429
	Common stock	180,808		180,808	180,808
	Additional paid-in capital	7,626,602		7,626,602	7,626,602
	Retained earnings	3,343,850	\$ 3,580,077	6,923,927	6,923,927
	Sales	22,944,017	(22,944,017)	-	22,944,017
Dr.	Franchise and royalty fees	5,492,531	(5,492,531)	-	5,492,531
	Cost of sales	14,910,622	(14,910,622)	-	14,910,622
	Franchise costs	1,499,477	(1,499,477)	-	1,499,477
	Sales and marketing	1,505,431	(1,505,431)	-	1,505,431
	General and administrative	2,422,147	(2,422,147)	-	2,422,147
	Retail operating	1,756,956	(1,756,956)	-	1,756,956
	Depreciation and amortization	698,580	(698,580)	-	698,580
	Interest income	(27,210)	27,210	-	(27,210)
	Income tax expense	2,090,468	(2,090,468)	-	2,090,468

**Table 2-5. Balance Sheet**

<b>Rocky Mountain Chocolate Factory, Inc.</b> <b>Balance Sheet</b> <b>As of February 28, 2010</b>		
<b>ASSETS</b>		
<b>Current Assets</b>		
Cash and cash equivalents	\$3,743,092	
Accounts receivable	4,427,526	
Notes receivable, current	91,059	
Inventories	3,281,447	
Deferred income taxes	461,249	
Other	<u>220,163</u>	
Total Current Assets		\$ 12,224,536
<b>Long-Term and Intangible Assets</b>		
Property and equipment, net	\$5,186,709	
Notes receivable, less current portion	263,650	
Goodwill, net	1,046,944	
Intangible assets, net	110,025	
Other	<u>88,050</u>	
Total Long-Term and Intangible Assets		\$ 6,695,378
<b>Total Assets</b>		<b><u>\$ 18,919,914</u></b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>Current Liabilities</b>		
Accounts payable	\$ 877,832	
Accrued salaries and wages	646,156	
Other accrued expenses	946,528	
Dividend payable	602,694	
Deferred income	<u>220,938</u>	
Total Current Liabilities		\$ 3,294,148
<b>Long-Term Liabilities</b>		
Deferred income taxes		<u>894,429</u>
Total Liabilities		\$ 4,188,577
<b>Stockholders' Equity</b>		
Common stock	\$ 180,808	
Additional paid-in capital	7,626,602	
Retained earnings	<u>6,923,927</u>	
Total Stockholders' Equity		<u>\$ 14,731,337</u>
<b>Total Liabilities and Stockholders' Equity</b>		<b><u>\$ 18,919,914</u></b>

**Table 2-6.** Cash Flow Classifications

Transaction	Would appear in this section of the Statement of Cash Flows...
1. Purchase inventory	Operating
2. Incur factory wages	Operating
3. Sell inventory for cash and on account	Operating
4. Pay for inventory	Operating
5. Collect receivables	Operating
6. Incur SG&A (cash and payable)	Operating
7. Pay wages	Operating
8. Receive franchise fee	Operating
9. Purchase PPE	Investing
10. Dividends declared and paid	Financing

## CASE STUDY 3 – STUDENT SCENARIOS

by  
Nicholas Fenske

September 19, 2018

## **Abstract**

This case study is particularly interesting in that it does not involve the use or analysis of any financial statements, or even any numbers at all. In fact, the work done in the accounting profession is, at best, only tangentially related to the case. And yet, “real world” matters take full stage, despite “real world” accounting being nowhere in sight. So what is this case study? The answer: a compilation of three different scenarios, each involving a real discussion that took place within the Patterson School of Accountancy. Yes – in this case study, we analyzed our peers! Presented with their scenarios, we split up into two sides – “agree” and “disagree” – and proceeded to debate the other side, as well as just generally discuss our thoughts and responses and the reasoning behind them.

Since this case study was explicitly designed to help us as we begin to plan our futures, how can I not be expected to attest that it has great potential to inform my future? Indeed, I am very grateful for the opportunity to have been exposed to the ideas that were dispensed throughout this case study, both in our debates and in our wrap-up discussion. Because this write-up is meant to feature my reflections on the three scenarios, I hesitate to go into much detail in this abstract for fear of restating the content on the following pages, but suffice to say that – as I write in response to the third scenario – there is no “playbook” for the path that we as accounting majors are to follow in the coming years, through our internships to our first jobs in public accounting. But this case study does a phenomenal job of introducing us to some crucial information to that end, and is valued.



### **3-1. Scenario 1**

The first scenario of the case study involved a conversation between two Patterson School of Accountancy students. One student, having seen his cousin's success and paychecks in New York City, tells his friend that he has decided to pursue tax law, and as a result will enter law school after getting his undergraduate degree. His fellow student affirms that that path could prove beneficial due to law school requiring less commitment than a master's in accounting, and the profession offering him the chance to make more money than he would in accounting. His friend also points out that this means that he could skip doing the traditional Patterson School internship. However, the student says that despite his planned switch to law school, he will still complete the accounting internship, in order to reap its benefits as well.

As a class, we were instructed to sit on one side of the room if we agreed with the student's decision, and to sit on the other side if we disagreed. I decided to sit with the "disagree" party for this particular scenario. The class seemed to be more or less evenly split on this scenario, but – interestingly enough – based on the debate/conversation that ensued, we all seemed to take a similar view of the student's actions. To elaborate on that, it didn't really come across that any of us disagreed with the student's choice to switch to law school; he is free to make that choice. Indeed, it seemed that the main point of contention arose from the student's decision to pursue the Patterson School internship,

knowing full well that he isn't intending to stay with whichever firm he interns with upon completion of the program.

To me, this was primarily a matter of principle. One of my first thoughts on this scenario was that the student shouldn't base his decision on the promise of more money to be earned in one profession over another. (Money is obviously a very real, and very important, consideration in choosing a profession, but it shouldn't be the *only* deciding factor.) I also questioned why the student would do an accounting internship; in my opinion, he ought to pursue a law internship instead. Indeed, a fellow classmate brought up the idea that the firms that recruit from Ole Miss may well become more skeptical of recruiting our students if we take internships but do not return for full-time positions. That said, Dr. Dickinson did inform us that the student's new route – tax law – is similar in most ways to tax accounting, and moreover, that most law firms will not give internship opportunities to students who are not enrolled in law school. With this in mind, it began to make sense to me why the student would continue to “use” the accounting degree as a stepping-stone to get to law school. Normally I wouldn't agree with this – my first reaction to scenarios like this is that the student is gaming the system, which I am a strong opponent of – but, having been presented with the facts of the matter, I can now sympathize somewhat with the student's path.

### **3-2. Scenario 2**

The second scenario presented a similar argument to the first, in that the issue revolved around students who are intent on, so to speak, “using” their Ole Miss accounting degree as a means of gaining a position in another similar, but unique, field. For instance, the first student in this scenario notes that she is an accounting major specifically because of the Patterson School’s high ranking, but does not find accounting fun; she would rather be an investment banker. A fellow student agrees, but wants to do consulting instead. A third student questions why the other two aren’t majoring in finance or some other field that would be better suited to their desired career paths.

Once again, I sat on the “disagree” side for this scenario. However, the division among my classmates became much more heavily lopsided, with a large majority choosing to agree with the two students who are accounting majors but have no desire or intent to become accountants. My primary reason for disagreeing in this scenario was the same for why I disagreed in the first one: to me, it sounds like these students are gaming the system. So why was the response of my classmates so different in this case than in the law school one? For one thing, it was noted that accounting is the framework for investment banking and consulting – so while Dr. Dickinson did inform us in the first scenario that tax law and tax accounting are indeed similar, it seems that perhaps it was still a bit difficult to connect the two in our minds; but with this scenario, it was much easier to see the connection, and as a result, it was much easier for my classmates to sympathize with the students’ decisions.

Even I must admit that I don’t necessarily disagree with the students’ desires; my main qualm was that it seemed that the students in the scenario were lacking in honesty,

in that they were majoring in one field but seeking a career in another. As one of my classmates on the same “disagree” side as I was pointed out, why not, at the very least, double-major? In short, I simply couldn’t get past the ethics of the matter. I was less concerned about the students’ decisions than I was the fact that said decisions seemed to be made in bad faith to the Patterson School of Accountancy. This feeling, however, is partly due to my upbringing; so as a result, not only is it understandable that my classmates who chose “agree” may have a different worldview in regards to this specific scenario, that is also completely acceptable. And in fact, one of my classmates on the “agree” side pointedly noted, “There is no common courtesy in corporate America.” While I more or less recognize this fact in the back of my mind, I often choose not to dwell on it, precisely because it doesn’t mesh well with my idealized view of how the world ought to operate. But there is no denying that there is truth in that statement, and it opened my eyes. Once again, despite still carrying some deep-rooted mistrust regarding the students’ motives, I can now better understand, and no longer completely frown upon, their decisions.

### **3-3. Scenario 3**

The third and final scenario of this case study was, interestingly enough, simultaneously the most complex of the night and the least divisive among my classmates. This one involved an email exchange a grad student recently had with Dr. Dickinson. Of course, the student’s name and all other relevant identifications were withheld, but the story remains the same: the student had recently completed an internship with a Big Four accounting firm in Washington, D.C., and received a job offer

to stay with that firm, at that location. The student, however, is from Dallas, and would like to transfer to the firm's Dallas office. The student asked Dr. Dickinson's advice on the ensuing process.

We were told to choose a side before hearing Dr. Dickinson's response to the student in the scenario. This time, I chose to sit on the side of the room agreeing with the student. The "agree" side had grown even more since the second scenario, leaving the "disagree" side with fewer than ten of my classmates. At first, I felt like I was simply upholding the same moral arguments I had come up with in the previous two scenarios: similar to the first scenario, where I thought the student should consider multiple options in choosing a profession besides simply money, here I thought that the student should be free to consider changing locations if he or she so desired. After all, as I wrote in my notes while the scenarios were playing out during class time, an internship does not necessarily mean that you're tethered for life. To my surprise, though, my classmates on the "disagree" side pulled my own honesty/ethics card against me – their argument was that the student should have chosen to complete his or her internship in Dallas, so as to avoid the issue he or she is now facing. In essence, by having gone to D.C. instead, the student now appears as if he or she deliberately played the system and used the internship as a way to explore a fun new locale, without having any intent to permanently stay in that locale once the internship was over.

Dr. Dickinson subsequently read us her own response to the student, which mimicked the "disagree" side's point – the firm will now wonder why you didn't choose to intern in Dallas as opposed to D.C. – and also cautioned that Dallas specifically is a difficult office to get into, so it may be a better way to go if the student simply stays in

D.C. for the time being, *until* a position becomes available in Dallas. The student's response was to explain that he or she had originally thought D.C. would be fun but has found it the opposite, and suggested that he or she may even drop their guaranteed position with the Big Four firm in order to return to Dallas. On this latter point, I think the entire class agreed – that would, to say the least, be a poor decision on the part of the student to exit the firm if he or she could not secure a transfer. Yet still, I couldn't help but go back to the idea that, if the student is going to be positively miserable in D.C., maybe s/he should return to Dallas after all, even *if* his or her job is at risk; I can't answer for him or her. Here's another word-for-word takeaway from my notes: There are things they probably could have done better, but it's not like there's a total playbook for this... if they knew at that time [that they were going to want to be in Dallas for a living], they should have said something at that time; but if they were still mulling at that time, they unfortunately can't go back in time to make a better decision, and they also shouldn't be expected to compromise on what they want just because of an honest mistake.

### **3-4. Overall Reflection**

The overarching idea of these three scenarios – particularly the last one – was, in my opinion, to let us know that a) it's tough, and b) there's no clear-cut right or wrong way to go about these things. Hence, why Dr. Dickinson created this case study; it's best for us to begin having these conversations now, instead of later. Dr. Dickinson went on to give us her own background information, opinions, and advice on the three scenarios, which can be summarized as follows (in no particular order):

- Circumstances do matter in making these sorts of decisions.
- Transparency with a firm, particularly from the beginning of one's relationship with them, is key.
- It is crucial to become a high performer in an internship and a job.
- An accounting degree is indeed highly transportable to other business disciplines, and there is nothing wrong with taking advantage of that fact.
- Don't choose a certain career path and/or employer based on money, friends, family, partners, or managers.
- The internship slots offered to Patterson School students are finite, hard-fought, and meaningful; seize the opportunity.
- Most firms will only hire full-time if one has had an internship with them.
- A typical firm's cash outlay per student during internships is \$175,000, and this cost is not recouped unless the student, upon receipt of a job offer, stays with that firm, in that location, for approximately three years.

I'm not including these here to say that Dr. Dickinson's opinions have superseded my own or that there was a predefined right and wrong answer in any of these three scenarios, nor do I believe that I am expected to do so or that the latter statement is true. But her advice and information have indeed changed my mind on several of the matters in question. Coming into this case study, I knew very little about any of the issues being discussed, and as a result, I didn't have much of a solid foundation on which to base my responses for the three scenarios. Therefore, having this information presented to us is, I think, a great benefit. As Dr. Dickinson herself said, very few Patterson School students (or accounting majors in universities nationwide, for that matter) are told these things...

but they ought to be. This knowledge can prove crucial in decision-making, and had each of the students in the three scenarios heard all of this ahead of time, perhaps the scenarios could have been avoided or made less divisive. In short, I feel like I now have a much better understanding of some things that I previously knew nothing about, and I am greatly appreciative that I was able to be a part of this larger discussion thanks to this case study. I will absolutely keep these findings in mind as I begin to make decisions about my future.



CASE STUDY 4 – ACCOUNTING FOR DEBT SECURITIES SALES AND  
IMPAIRMENTS

by  
Nicholas Fenske

October 3, 2018

## **Abstract**

This case study seemed to have a number of purposes. First and foremost, of course, it provided information about an economic entity, which we had to analyze and interpret. But it also had us complete those tasks from a number of different viewpoints, including that of an internal CFO of the entity as well as those of an external auditor and a bank regulator. Speaking of banks, yes, this case was also centered on a bank – which, I believe, was another purpose; that is, to expose us to accounting as it concerns entities other than those presented to us in our principles and intermediate courses so far. (I know I, for one, was recalling my macroeconomics class while working on this case a lot more so than I was any accounting class.) Lastly, I think an additional purpose of the case was to throw at us information we have not seen or explored before: namely, debt securities and impairment losses, and the FASB guidance on how to deal with those elements.

In short, this case introduced a lot of new knowledge and viewpoints for us to consider. I believe that that exposure will serve me well as time goes on; now that I know these things, I can be ahead of the curve. To be honest, all of this new information also made this case very challenging; it also did not help that I (and half of my classmates) had to miss the administration of the case – and, therefore, helpful instruction and background information – due to an exam conflict. But at the same time, I feel like that fact has also served to make everything that I learned while researching and completing this case especially important and helpful to my future, which is ultimately what matters.

**4-1. Assume that Generic Bank does sell the aforementioned securities shortly after year end in early 20x3. Does Generic Bank have an impairment loss on the seven securities designated above in 20x2?**

Because CFO Joshua Winters made the decision to sell the securities prior to year-end 20x2, Generic Bank must recognize an impairment loss in 20x2 for any securities identified for sale whose fair values are less than their amortized costs. In particular, of the seven securities identified, the securities with the CUSIP numbers ending 003, 015, 025, 030, and 076 have fair values less than their amortized costs, and as such each have impairment losses.

As noted in the text of the case study (which itself is based on thorough research of accounting standards), an impairment loss on a security is recognized a) if the decline in fair value is due to credit losses, or b) if the decline is due to market fluctuations *and* the entity does *not* have the intent and ability to hold the securities until the loss is recovered. These facts are confirmed in ASC 326-30, as excerpted in Ernst & Young's *Technical Line: A closer look at the new credit impairment standard*. In the case of Generic Bank, it is stated that the losses are not due to credit losses, but instead are due to market fluctuations. It is also stated that the bank does have the ability to hold the securities until the losses are recovered. However, the fact that the securities are identified for sale, and are indeed sold in early 20x3, indicates that the bank does not

exhibit the *intent* to keep the securities, which means the bank must recognize the impairment loss on the five affected securities listed above.

**4-2. Assume that Generic Bank does sell the aforementioned securities shortly after year end in early 20x3. Does Generic Bank have an impairment loss on securities other than the seven securities sold? If so, how would you determine the extent of the impairment?**

Generic Bank should not have an impairment loss on any other available-for-sale (AFS) securities with the exception of the five listed previously, which were indeed sold at the start of 20x3 (alongside two other securities that did not have any impairment losses). This is because, unlike the seven securities that were identified for sale, the bank appears to show no indication of selling any of the remainder of its AFS securities portfolio. The bank has already demonstrated that it has the ability to hold the securities until the time that those with unrealized losses can recover said losses, and absent the indication that it will sell any more securities, the bank is consequently exhibiting the intent to hold said securities for that duration as well. Therefore, the requirements for recognizing an impairment loss are not met.

The reasoning for this thought pattern is once again gleaned through both the text of the case study and EY's *Technical Line: A closer look at the new credit impairment standard*, particularly Illustration 7 of that document, which shows an "Impairment decision tree for AFS debt securities." Both sources also reveal two additional reasons not to recognize any impairment losses on the remainder of Generic Bank's AFS debt

securities portfolio: First, as noted in an excerpt of the relevant ASC in the EY report, it is possible for “debt securities bearing the same CUSIP number [to] be aggregated” in regards to recognition of unrealized gains and losses; but since each of the securities in Generic Bank’s portfolio have unique CUSIP numbers, the impairment losses on those which were sold ought not to affect any of the remainder. Second, as the case study explains, the bank’s decision to sell the seven securities is entirely voluntary, and the bank “does have other means to raise the needed liquidity if needed;” this thus reaffirms the bank’s ability and intent to hold the securities, thereby eliminating the need for it to recognize any additional impairment losses.

**4-3. Does your answer change if you assume the role of Heather Herring, the external auditor? Does your answer change if you assume the role of a bank regulator? What other factors might an external auditor or regulator consider in making their determination?**

Yes, from a viewpoint different from that of the internal CFO of the bank, more scrutiny would be applied to the determination of whether or not the securities remaining in Generic Bank’s portfolio have impairment losses. First and foremost, the very fact that the bank considers the securities to be available for sale and, indeed, that “selling securities during a period is not uncommon for Generic Bank” should be enough to merit the external auditor’s attention regarding the “intent to sell” provision. Just because the bank has not specifically identified any additional securities to sell does not mean that such a sale is not being contemplated; and if one is, an impairment loss should be recognized. Also, as noted in the body of the case study, Generic Bank’s initial claim that

no credit losses are present would also receive scrutiny from both Herring and any bank regulatory agencies: as the text reads, “an external auditor or regulator would approach this assertion with an appropriate professional skepticism.” If credit losses are to blame for the declines in value of any or all of the remaining securities in the bank’s portfolio, then each of the affected securities would need to recognize impairment losses, regardless of the bank’s ability and intent to hold them.

As with the external auditor, a bank regulator would likewise consider the same factors as mentioned previously in making his or her own assessment of the necessity or unnecessary of recognizing impairment losses for the remainder of Generic Bank’s AFS debt securities portfolio. The background information to this case notes that bank regulators are perhaps even more vigilant of bank’s actions, and as such, it is possible that a bank regulator would thoroughly examine each individual security on a case-by-case basis, looking for various factors that might necessitate recognition of impairment, including but not limited to “adverse conditions specifically related to the security, an industry, or a geographic area” and “the payment structure of the debt security...and the likelihood of the issuer being able to make payments that increase in the future.” These and additional factors are laid out in the August 2018 edition of the Office of the Comptroller of the Currency’s *Bank Accounting Advisory Series*. The report also recommends, “Once a debt security is in an unrealized loss position, banks must consider all available evidence” and, “The longer the debt security has been impaired and the greater the decline in value, the more robust the documentation should be;” the bank regulator would certainly be sure to confirm that these actions are being taken as a part of their analysis of Generic Bank’s portfolio. Such documentation could present pertinent

information and/or evidence that the bank regulator would consider as justification for determining an impairment loss, which perhaps the CFO of the bank overlooked or (more alarmingly) purposefully omitted in making his own impairment determination.

**4-4. How would your assessment of the existence of an impairment in both Requirements 1 and 2 change if the securities sold had been collectively in a net gain position? What if all the securities sold were in gain positions?**

The text of the case study indicates that “under ASC 326-30, the bank is responsible to determine if securities in unrealized *loss* positions are impaired” (emphasis added). If each of the seven securities sold were all individually in gain positions instead – that is, their fair values exceeded their amortized cost bases – it would stand to reason that there would be no need to recognize any impairment losses on those securities. However, in the event of a collective net gain scenario, it would be necessary to separate the seven securities from each other and examine each security individually; if any of the seven individually had a fair value below its amortized cost basis, that security (or those securities) would still require recognition of an impairment loss. After all, a net gain is still achievable even if some of the components of the calculation have individual losses.

In either scenario, the answer regarding determination of impairment losses on the remaining unsold securities in Generic Bank’s portfolio remains the same: each remaining security must be examined on an individual basis, using the analysis factors presented throughout this document, to determine whether or not recognition of an impairment loss is necessary. As long as each AFS security can be separated from one

another in terms of CUSIP numbers and similar factors, a gain or loss on an unrelated security should not affect any given security.

**4-5. [Given a new set of assumptions regarding the bank's financial position,]**

**Assume that Generic Bank does sell the aforementioned securities shortly after year end in early 20x3. Does Generic Bank have an impairment loss on securities other than the seven securities sold?**

Under these new circumstances, Generic Bank's "access to other forms of borrowing to meet liquidity needs has become more limited," and as such, the bank is looking to sell securities in order to "improve capital ratios" as opposed to the prior assumption of freeing up cash "for employee year-end bonuses and...strategic acquisitions in the first half of the following year." This change in position affects the judgment applied previously in regards to the remainder of the bank's AFS debt security portfolio. Specifically, given that the bank now appears to be exploring security sales as a more regular, material option, the bank is effectively demonstrating a greater intent to sell its securities. If it could be determined that this intent is overarching within the bank, then there is a possibility that all of the remaining securities with unrealized losses (that is, fair value below amortized cost) may need to recognize impairment, regardless of whether or not those particular securities have yet been specifically identified for future sale.

This option could prove quite harmful to Generic Bank, seeing as how the "gross unrealized losses in the [securities] portfolio...[measure] \$1.17 billion, or roughly 10% of the assets of the bank." These losses would have to be realized into earnings if any of the



affected securities are determined to be impaired, while the securities with gains would continue to have said gains go unrealized unless or until they are sold. Moreover, even if the intent to sell is not necessarily present but the financial position of the bank has deteriorated enough to the point where “it is more likely than not that the entity will be required to sell the security before the recovery of its amortized cost basis due to liquidity needs, contractual or regulatory obligations or for other reasons” (as quoted from RSM’s “Impairment and sale considerations for debt securities” page, but also mentioned in most of the other referenced publications), Generic Bank will still be required to recognize impairment losses as warranted. However, if Generic Bank could prove that they do *not* intend to sell any more securities besides the seven sold at the beginning of 20x3 and that they do *not* foresee having to sell any securities as a result of their financial position, they may be able to avoid recognizing impairment losses on the securities remaining in their portfolio; this would ultimately depend on the judgment of the bank, the external auditor(s), and the bank regulator(s).

## CASE STUDY 5 – CITY SELECTION

by  
Nicholas Fenske

November 7, 2018

## **Abstract**

When I first joined this class, I assumed that these case studies would be all numbers, all the time. Quite obviously, I was incorrect in that assumption. And I am very happy to recognize that fact, too. This particular case study revolves around having us research a plethora of aspects of the top two cities that we may be interested in living in, ranging from what the weather is like to crime rates to modes of travel. We are even tasked with constructing a monthly operating budget for our second year of living in said cities, and picking out potential apartment complexes. Then, we assess our findings, and decide whether we still want to live in either city, and if so, which of the two we prefer.

This is only the abstract, so I do not want to spoil my answer to that ultimate question just yet. But I would like to express some gratitude about being asked to complete all of this research. It may not be traditional accounting, and to some, that may make this case study seem irrelevant. But the truth is, this case study is extremely relevant to where we are right now. As juniors majoring in accounting, next year we will begin the internship and recruitment process, where we will have to be prepared to make crucial decisions about our futures, often without full confidence in the paths we choose given how little we will know about what we are choosing between (for example, the age-old question of “audit or tax?”). This case study allows us to tackle at least one of those major questions – that of where to live – which makes the effort very beneficial at this stage. It may not be “all numbers,” but this case is definitely relevant to accounting.

### **5-1. What is the population?**

To begin, I should clarify that the two cities I am interested in are Memphis and Nashville, both in Tennessee. I am from Hernando, Mississippi, and would like to stay as local as possible.

Memphis's population is just shy of 686,000, while Nashville's population is similar, totaling around 660,000 in the city. (Most figures for Nashville instead include all of Davidson County, and raise the total to around 691,000. By contrast, Shelby County's population is around 937,000.)

### **5-2. Describe the climate and seasonal fluctuations.**

A lot of my answers for Memphis are based on personal knowledge, having lived in the area since 2002; and I assume that many of the answers apply to Nashville as well, given that Nashville is only about three additional hours away. The Mid-South's climate in general seems to include a lot of sunny days, rainfall that is not overly excessive, and very hot summers. Temperature-wise, I often compare the weather to a roller coaster, particularly in the so-called "spring" and "fall." (More often, it feels like we only have one nice week of either season, and spend the rest of the time either in extended summer or winter.) The specific statistics for Nashville's weather are all just a tiny bit below those posted for Memphis, including both average temperatures and rainfall amounts.

**5-3. Describe the city’s topography, scenery, and other geographic or geological features of the area in which the city is located. Include pictures where appropriate.**

Both cities are located next to rivers – Nashville to the Cumberland River, and Memphis, the Mississippi River. While the suburbs of both cities include a bit more in the way of greenspace, each city itself understandably has more in the way of buildings – not to say that those are not scenic also, however. (In fact, in researching this question, several sources make light of the many “Instagrammable” photo opportunities the city skylines, bridges, historical buildings, etc. offer!) Finally, geographically-speaking, Memphis is the center of a large tri-state region (including TN, MS, and AR), while Nashville’s metropolitan area consists of much of middle Tennessee.



***Figure 5-1. “Instagrammable” Memphis.***

**5-4. What are the individual tax rates within the city (e.g., consider federal, state, and local income tax, property tax, and any other taxes you’d be likely to pay. Quantify what this means based on a starting salary of approximately \$50,000/year)?**

In researching the relevant information to be able to answer this question, I discovered a nice fact: Tennessee has some very low taxes! In fact, at the state level, Tennessee has no income, property, or payroll tax (all of which are the taxes I believe I

would be expected to pay), which makes the state part of the question easy. As for the federal part, payroll tax would see \$3,825 taken out of my annual salary of \$50,000 a year (6.2 percent for Social Security, plus 1.45 percent for Medicare). In the federal income tax bracket, that salary would see me paying \$4,453.50 plus 22 percent of the amount over \$38,700 (i.e. \$11,300 times 22 percent, or \$2,486), for a total of \$6,939.50.

Local taxes are another story. Just like Tennessee has no income or payroll tax, neither do the cities of Memphis or Nashville. But the two cities *do* have significant property taxes. I cannot say exactly what amount of city property taxes I would be paying, given that that would be based off of the assessed value of wherever I wind up living. But I can lay out the property tax *rates*. In Nashville, the property tax rate is \$3.155 per \$100 value in the Urban Services District (which I think is likely where I would be living), or \$2.755 in the General Services District. From my research, it appears that these rates apply to the whole of Davidson County, whereas in Memphis, there are separate property tax rates for the county and its cities (both of which, of course, must be paid). The Shelby County rate is \$4.05, and the Memphis city rate is \$3.19. Finally, because I also mention Germantown as a viable location for an apartment in a later question, I have also found its property tax rate to be \$1.95 per \$100 value.

#### **5-5. What transportation hubs are in the city?**

From personal knowledge, transportation hubs in Memphis include the Memphis International Airport, the MATA (Memphis Area Transit Authority) buses and trolleys within the city, multiple interstates and highways (including, but not limited to, I-40, I-

240, I-55, Hwy 72/Poplar Avenue, Hwy 78/Lamar Avenue, and Hwy 51/Elvis Presley Boulevard), and, of course, the Mississippi River. From research, Nashville has its own transit authority for public transportation, as well as many of the same amenities Memphis has – an airport, multiple interstates and highways, and even its own neighboring river. (Not that I personally would use a river, in either city, to get to and from work... nor an airport, for that matter... but all the other options are fair game!)

**5-6. What are the city's most prevalent industries?**

Memphis has a number of industries represented, including transportation and shipping, manufacturing, and services. Companies include FedEx, Pfizer, AutoZone, International Paper, ServiceMaster, and more. Industries in Nashville, meanwhile, include – of course – music/entertainment, as well as automotive and healthcare. In fact, per City-Data, “according to the Nashville Health Council, the city is known as the nation's health care center.”

**5-7. Describe the quality of the city's healthcare.**

Based on my answer to the previous question, it would seem obvious that Nashville has some great healthcare! Despite this, unfortunately, the state of Tennessee only ranks fortieth in the country for healthcare quality. That said, though, of all the hospitals in Tennessee, three in Nashville rank in the top ten – including Vanderbilt University Medical Center, which is number one in the state – as do two in Memphis.

Regarding children's healthcare, too, I cannot neglect to mention that Memphis is home to both St. Jude Children's Research Hospital and Le Bonheur Children's Hospital.

**5-8. What types of crime are common within the city, and where are the locations within the city to avoid?**

Growing up, my mom would have the 6AM news on in our house while I was getting ready for school in the mornings. Without fail, it seemed like there would always be a report on at least one of the following: a shooting, a stabbing, or an apartment fire. Unfortunately, these are far from the only types of crime in Memphis (others include robberies and assaults), and equally unfortunately, Memphis is considered one of the most dangerous cities in the country. Knowing this, I – and my parents – typically try to stay away from anywhere in Memphis at night, just to be safe. Generally speaking, I believe a majority of the professional jobs in Memphis are concentrated together (for example, in Downtown or in East Memphis), and as such it would be best to stay in those areas and avoid other areas of the city, especially areas that are mainly residential or are known for increased crime rates (such as South Memphis).

It is harder to come up with this information for a city that I am unfamiliar with, but from what I am able to find, it seems that Nashville is in a similar boat as far as having to deal with a lot of violent crime (although property crime is apparently lower). In fact, because Nashville is growing, its crime rate is following suit, which is a shame but not unexpected. By contrast, Memphis has been seeing decreases in its crime rate. As far as areas to avoid, it seems easier (understandably) to instead pull up areas that are safe



and worth spending more time in while avoiding other areas; as with Memphis, in Nashville this includes working areas of the city as well as most of the suburbs (Cool Springs, Brentwood, etc.).

**5-9. Based on where you see yourself living for the first three years, how much rent do you expect to pay? Back up this assertion with sample properties from each location (including pictures). Describe the square footage, amenities, need for a roommate, availability of parking, etc.**

To find my sample properties, I used a website called ApartmentList, which asks for one's pertinent personal information and preferences, and uses that to compile a list of apartment complexes that meet those selected criteria. Given the previous assumption that my yearly income will be \$50,000, I told ApartmentList that I had a monthly income of \$4,000, and chose \$1,500 as my monthly maximum to pay for an apartment. (This may or may not be realistic, but I wanted to be conservative for this exercise.) I also requested a one-bedroom apartment. (Again, I have no clue at this moment whether or not I will want or need a roommate, so I was being conservative in this choice.)

In Nashville, the top two results were One MetroCenter and Cherry Creek Apartments. Both complexes have in-unit laundry, as well as the typical amenities one would desire: ceiling fan, refrigerator, oven/stove, microwave, air conditioning (a



**Figure 5-2.** One MetroCenter, Nashville.

must!), etc. One MetroCenter also offers a gated parking lot and some very nice outdoor amenities surrounding the property, including a lake and access to several parks. Cherry Creek, meanwhile, seems more activity-oriented with its tennis, racquetball, and volleyball courts (among other amenities). With my stipulation of a maximum rent of \$1,500 a month, rent for a one-bedroom apartment at One MetroCenter ranges anywhere from \$1,395 to \$1,485; the figures at Cherry Creek are slightly lower, ranging from \$1,057 to \$1,383.

For my Memphis apartment search, given that I am more familiar with the surrounding areas than I am for Nashville, I had ApartmentList also include several suburbs of Memphis as acceptable locations. Originally, I was envisioning living somewhere in DeSoto County, closer to home... but the only apartment complex ApartmentList pulled up was North Creek Apartments in Southaven. North Creek is a gated community with in-unit laundry, but it is on Stateline Road, which from experience I do not think would be the most ideal place to live. Its rent is only \$980 a month.

Meanwhile, ApartmentList also brought up a nice complex in Germantown, known as The Retreat at Germantown, which ranges between \$1,227 and \$1,252 a month for a one-bedroom. This complex, like the rest, offers in-unit laundry (and the other typical



**Figure 5-3.** *The Retreat at Germantown.*

amenities listed above, plus a fireplace and an icemaker), and similar to One MetroCenter in Nashville, boasts a lake – in fact, six of them! Last but not least, parking is again located on a surface lot at this complex, which is located just north of Poplar Avenue.

**5-10. What is the typical mode of commuting? Based on your answers identified in the previous question, what are your likely commute times?**

The typical mode of commuting in both Memphis and Nashville is driving. (I know it is said that anything in Memphis is only a 15-minute drive away!) I do not know yet which firm I would like to work for, but upon researching their locations, it appears that many firms are concentrated in the same areas – downtown in Nashville (all Big Four firms, as well as others), and the Poplar/Ridgeway area in Memphis (the three of the Big Four who retain a Memphis presence, plus some local firms such as RBG, where I attended a summer leadership conference this past May) – which makes for some nice generalizations of commute times from the apartments listed in the previous question.

The distance to the Poplar/Ridgeway area of Memphis from North Creek Apartments in Southaven is approximately 20 miles (30 minutes), and from The Retreat at Germantown is approximately five miles (15 minutes!). Meanwhile, the distance to downtown Nashville from Cherry Creek Apartments is approximately 15 miles (20 minutes), and from One MetroCenter is a mere two miles (ten minutes).

**5-11. Where will you do your grocery shopping?**

Is it weird that I actually enjoy grocery shopping? I know someone who travels to a different store each week for his weekly shopping trips. If I had the time for that, I think I might enjoy it as well. But from a practicality standpoint, it would probably be best if I continue shopping where I always have, which is Walmart. (I did a science experiment in elementary school proving that they really do have the lowest prices.) As for a specific

store location, I suppose it would have to be whichever Walmart would be closest to where I would wind up living in either city.

**5-12. How will you do your laundry?**

As noted in my response to Section 5-9, all of the apartment complexes ApartmentList suggested for me feature in-unit laundry. (I would have settled simply for on-site laundry, for what it is worth!) I will probably also go to a local dry cleaners for my professional clothes, such as button-downs and blazers.

**5-13. Name at least three civic, religious, or charitable organizations you would like to be active in for each city.**

A few civic organizations I would like to be involved in in Memphis include the Memphis Food Bank and some library system, whether Memphis's own or continuing my longstanding commitment with the First Regional Library system where I am from (I have been a volunteer at the Hernando branch, which is also the system's headquarters, since 2012). In Nashville, I think it would be a good idea to do the same – that is, to donate some time or materials to a local food bank or library system there. Finally, this last one applies to both cities – my parents have always donated to St. Jude, and I would like to do the same. (Just because St. Jude is physically based in Memphis does not mean that I cannot contribute money to it from Nashville!)

**5-14. What are the sports, entertainment, or recreational activities that you would be most likely to engage in within the city? Name at least five activities.**

This question is a tricky one for me. I do not engage in many activities. Much of my free time I enjoy spending in my room, on the computer or watching TV. It is likely that I will continue to spend most of my free time in this manner once I am employed. On top of that, I am not a sporty person at all. So, finding five activities may be a bit of a stretch. That said, I think I have come up with some doable ideas.

The general categories that I have thought up are restaurants, bookstores, parks, shopping, and movies. To start with, assuming I have enough expendable income to do this, I would like to try various local restaurants in either city (particularly Italian – my favorite!). Similarly, I would like to check out area bookstores, whether a chain store or a local shop (bookstores are so few and far between these days that either are acceptable). As far as parks are concerned, with the apartments I selected in an earlier question, it sounds like I may have the equivalent of a park right at my disposal at either complex! Still, it would be nice to try and find some other local park(s) too, such as Shelby Farms Park in Memphis. The fourth category I chose is shopping – as I mentioned earlier, I actually enjoy grocery shopping, and all shopping in general, really. (Strange, I know.) I would definitely like to check out all of the different shopping options available to me in both cities. Last but not least, going to the movies would be another fun activity. In Nashville, it appears that a majority of the movie theatres are part of a national chain, whereas the theatres in Memphis are the same as here in Oxford (and my home county of DeSoto) – a local chain known as Malco.

**5-15. What are the modes of traveling back to your hometown from this city?**

**What is the average cost you'd incur for each trip back home?**

As discussed previously, both Memphis and Nashville have a slew of interstates surrounding them, which represent the easiest way to travel back home from either city. It would obviously be a quicker drive from Memphis (again, as discussed), but even Nashville is only about three hours away by car – not bad at all.

As far as cost is concerned, for a trip of around 230 miles from Nashville to Hernando... in a car that gets about 25 miles to the gallon... and assuming gas prices of around \$2.60 a gallon (an amalgamation of Memphis's current average of \$2.55 and Nashville's \$2.65)... I would say that trips back home would cost about \$24.00 one-way, and \$48.00 round trip. Likewise, with Memphis being just over one-tenth of the distance that Nashville is to Hernando at 25 miles away, a one-way trip would be the price of one gallon of gas – \$2.60 – and a two-way trip would cost double that at \$5.20. (Note that these are only the costs per trip... total costs would depend on how often I am able to go home.)

**5-16. Based on your findings, develop a model monthly operating budget for each city for Year 2, assuming that with bonuses for being a high performer, your annual salary is \$60,000.**

Table 5-1, which shows my monthly operating budget for Year 2, can be found on the next page. The figures are, of course, only ballpark estimates, many of which are based on factors mentioned in this case study so far, or on my family's current payments.

<b>Table 5-1. Model Monthly Operating Budget for Year 2 (Memphis and Nashville)</b>	
Annual Salary	\$ 60,000.00
Monthly Paycheck	\$ 5,000.00
Payroll Taxes (see Section 5-4)	382.50
Estimate of Other Possible Considerations (such as 401K, etc.)	100.50
Monthly Take-Home Amount	\$ 4,517.00
Apartment Rent	1,500.00
Savings	200.00
Groceries	350.00
Gas	120.00
Phone	80.00
TV/Internet	130.00
Utilities	160.00
Insurance	120.00
Dry Cleaning	50.00
Amazon Prime (yearly payment divided into monthly equivalent)	10.00
SiriusXM (yearly payment divided into monthly equivalent)	20.00
Other Shopping and Entertainment	300.00
Excess	<u>\$ 1,477.00</u>

I constructed Table 5-1 as a general budget so that it may apply to both Memphis and Nashville. Although there may be some minor cost differences, I do not foresee any major differences between living in either city. The most relevant category for such cost differences would probably be gas, but I believe the \$120 figure I built in should be plenty to cover the cost of gas each month in either city.

**5-17. Finally, based on your full analysis, determine whether you still want to live in both cities, and if so, which one is your preferred city and why?**

Yes, after all of this research, I am still interested in living in either Memphis or Nashville in the future. In fact, looking up all of this information has made me feel more informed on what living in either city would be like! Given that I knew a lot about Memphis already, it was nice to learn more about Nashville (while also still discovering some new things about Memphis); and, as far as the state of Tennessee in general is concerned, it was particularly helpful to learn about the state's tax system (i.e., there are practically no state taxes!).

I am relieved to note that nothing I found while completing this case study has convinced me that Memphis is a poor choice, so – as it did prior to entering this assignment – Memphis remains my preferred city. Much of my decision boils down to the reasons I have mentioned earlier: I have lived in the area for 16 years and am a homebody; I genuinely like this region and do not want to leave it. If anything, this case has actually reaffirmed my preference, insofar as it allowed me to further investigate the realities of living in Memphis such as taxes and apartment complexes.

This is not to discount Nashville's viability; indeed, if the conditions were right, I would absolutely consider Nashville. (Not to mention that Nashville seems to be a rapidly growing city, both in regards to the accounting profession and simply the city itself.) For that matter, I would also consider other local areas, such as Jackson, Mississippi (which occurred to me might be a better "second" city to have focused this case on only after I had already completed half of the assignment!). That said, though, as long as Memphis is available to me as the city in which to start my career, I will gladly take the opportunity.



## CASE STUDY 6 – WORLDCOM, INC.

by  
Nicholas Fenske

November 16, 2018

## **Abstract**

This case study focuses on WorldCom. Does that name ring a bell? I will admit, I cannot remember ever hearing of WorldCom prior to college. (If I did, I was very young.) But as soon as I stepped foot in my first accounting class here at Ole Miss – on the very first day of Principles I, as a matter of fact – I learned of WorldCom. And Enron. And Arthur Andersen. The University of Mississippi, in conjunction with its great professors and instruction in the school of accountancy, also makes sure to impress upon students the dangers and consequences of ethical lapses in the profession. Since that first day in Principles I, I have continually heard about these three organizations and their collapses due to improper accounting. Just prior to this case study, in fact, I had an essay assignment in another class analyzing WorldCom.

Whereas that other assignment focused specifically on the ethics of the matter, this case study had us dig further to examine the financials and interpret exactly where WorldCom went wrong. We worked backwards to reconstruct their improper journal entries, and then, from there, moved forwards to arrive at a corrected net income figure adjusted for the proper accounting methods. Also worth mentioning is that the line costs aspect of this case – that is, the decision between capitalizing or expensing a cost related to a fixed asset – coincided with what we just covered in Intermediate I. So not only are these case studies great learning opportunities, they also are purposefully designed and scheduled to make the Patterson School experience feel like an integrated whole.

**6-1. a) Explain how FASB Statement of Concepts No. 6, *Elements of Financial Statements*, defines “asset” and expense.”**

SCON 6 defines assets as “probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events.” Expenses, meanwhile, are defined as “outflows or other using up of assets or incurrences of liabilities (or a combination of both) during a period from delivering or producing goods, rendering services, or carrying out other activities that constitute the entity’s ongoing major or central operations.”

In other words, an asset is – generally speaking – something that a company owns and can benefit from. An expense, on the other hand, is recognized when cash is paid out for some purpose, or prepaid assets are depleted, or property, plant, and equipment are depreciated (no monetary value), etc. Expenses generally occur in the company’s normal line of business.

**b) In general, when should costs be expensed and when should they be capitalized as assets?**

Per Kieso, Weygandt, and Warfield’s *Intermediate Accounting – 16<sup>th</sup> Edition*, “In general, costs incurred to achieve greater future benefits from the asset should be

capitalized, whereas expenditures that simply maintain a given level of service should be expensed.”

In the context of property, plant, and equipment, capitalization means to debit the cost of some expenditure that increases the value of the asset directly to the asset account itself, rather than to an expense account. In this way, the records reflect the increase in value of the asset. Routine expenditures such as maintenance, however, do not increase the value of the asset, and as such are simply expensed as normal. In essence, the consideration is whether or not the expenditure provides additional benefit over and above the asset’s existing state.

**6-2. What becomes of “costs” after their initial capitalization? Describe, in general terms, how the balance sheet and the income statement are affected by a decision to capitalize a given cost.**

When costs are capitalized to a fixed asset, they become a part of the asset’s cost basis. As a result, in the calculation of depreciation expense, the capitalized costs become a part of the asset’s depreciable base, which consists of its cost less any salvage value. Depreciation is recorded in every period in an entry that debits Depreciation Expense and credits Accumulated Depreciation. Depreciation Expense, although nonmonetary in nature, heads to the income statement, while the cumulative value of Accumulated Depreciation is deducted from the fixed asset’s cost to arrive at the asset’s book value in the balance sheet presentation.

The ultimate goal of depreciation is to allocate the cost of a fixed asset over its useful life until the book value of the asset is reduced to its salvage value. By capitalizing an expenditure rather than expensing it, that cost hits the income statement in a prorated fashion over a number of years as a part of Depreciation Expense. In contrast, if the cost were to be expensed, the total cost would hit the income statement all at once. So, capitalizing costs results in a lower amount of expense being realized on the income statement in a given year, which in turn – all else held constant – would produce a higher net income figure for each affected year. Similarly, as noted previously, capitalizing a cost would increase the value of a fixed asset, which would lead to an overstatement of the asset's value on the balance sheet if the cost was improperly capitalized.

**6-3. Refer to WorldCom's statement of operations. What did the company report as line costs for the year ended December 31, 2001? Prepare the journal entry to record these transactions for the year. Explain, in your own words, what these "line costs" are.**

On WorldCom's statement of operations (aka income statement) for the year ended December 31, 2001, the company reported line costs as an operating expense valued at \$14,739 million. A cumulative journal entry for these costs on WorldCom's books would look like this (in millions):

Line Costs Expense	14,739
Accounts Payable (or Cash)	14,739

Per the *Wall Street Journal* article “Accounting Spot-Check Unearthed a Scandal in WorldCom’s Books,” line costs primarily arise from “telecom access and transport charges.” In other words, line costs are regular expenditures required to maintain an existing level of service.

This journal entry would primarily effect the income statement (because, regardless of which account is debited, Accounts Payable [or Cash] would always be credited). Specifically, all else held constant, net income would decrease by \$14,739 million. If a portion of WorldCom’s overall line costs were improperly capitalized (see later sections), the amount expensed would be lower than it should have been, and as a result net income would have been overstated.

**6-4. Refer to the *Wall Street Journal* article. Describe the types of costs that were improperly capitalized at WorldCom. Explain, in your own words, what transactions gave rise to these costs. Do these costs meet your definition of assets in Section 6-1?**

Again, as noted in the previous section, the *Wall Street Journal* writes that WorldCom’s “line costs...consist principally of access charges and transport charges.” A perhaps more understandable explanation of the transactions that gave rise to these costs would be to say that they are “charges paid to local telephone networks to complete calls.” In other words, line costs – and the transactions that give rise to them – seem to be a completely regular, routine cost of doing business to WorldCom. They do not, then, produce any additional benefit over and above the existing cost of the fixed assets to

which the costs were capitalized. Therefore, the costs do not meet the definition of assets or the qualification for capitalization, as were stated in Section 6-1. The costs should have been expensed.

The article further details WorldCom's chief financial officer's justification of the improper capitalization of the line costs: "Mr. Sullivan...gave an impassioned defense of his decision, saying that since WorldCom wasn't receiving revenue, he could defer the cost of leasing the lines until they produced revenue. But KPMG officials weren't satisfied, citing accounting rules that clearly dictate that the costs of operating leases can't be delayed...Unless the [costs apply to a long-term asset and the] asset is going to generate value in future years, the cost for it can't be capitalized."

**6-5. Prepare a single journal entry to record the improperly capitalized line costs of \$3.055 billion for the year. Where did these costs appear on the balance sheet? Where on the statement of cash flows?**

WorldCom's cumulative journal entry improperly capitalizing the aforementioned line costs for the year 2001 may have looked something like this (in millions):

Property, Plant, and Equipment	3,055
Accounts Payable (or Cash)	3,055

As noted previously, on the balance sheet, these costs appeared as part of Property, Plant, and Equipment, inflating the value of that account. On the statement of cash flows, this amount would have been included as a capital expenditures outflow within the cash flows from investing activities section.

In other words, the effect – in 2001 – of this improper entry was to overstate Property, Plant, and Equipment on the balance sheet; to overstate capital expenditures in the statement of cash flows; and to overstate net income in the income statement (because this amount was capitalized to an asset account instead of being deducted as an expense, as it should have been). In future years, PPE would remain overstated, and the cost would have been amortized over the asset's useful life via depreciation expense. This would have ensured that net income would continue to be overstated in future periods.

**6-6. In a sworn statement to the Securities and Exchange Commission, WorldCom revealed details of the improperly capitalized amounts (in millions) in 2001: \$771 in the first quarter, \$610 in the second quarter, \$743 in the third quarter, and \$931 in the fourth quarter. Assume that WorldCom planned to depreciate these capitalized costs over the midpoint of the range for transmission equipment as disclosed in note 1. Further assume that depreciation begins in the quarter that the assets are acquired (or costs capitalized). Calculate the related depreciation expense for 2001. Prepare the journal entry to record this depreciation.**

The midpoint of the range for transmission equipment as disclosed in Note 1 to WorldCom's financial statements is 22 years, which means 22 years is the useful life assumed in the calculations for the figure to follow. Additionally, the fact that depreciation begins in the quarter that the costs are capitalized means that the figure to follow consists, for example, of one full year's depreciation for the first quarter's cost, three-fourths of a year's depreciation for the second quarter's cost, and so on. Ultimately,



WorldCom's composite journal entry to record its depreciation expense related to its improperly capitalized line costs in the year 2001 would be as follows (in millions):

Depreciation Expense	83.3
Accumulated Depreciation—PPE	83.3

Once again, this figure means that net income in 2001 was reduced by only \$83 million of the total \$3,055 million of improperly capitalized line costs. Instead of the total amount being expensed fully in 2001 as it should have been, under this treatment the remainder of that \$3,055 million would have been amortized to the income statement across the related property, plant, and equipment's (assumed) useful life of 22 years.

**6-7. Use your answers from Sections 6-5 and 6-6 to determine what WorldCom's net income would have been in 2001 had line costs not been improperly capitalized. Use 35 percent as an approximation of WorldCom's 2001 marginal income tax rate in your calculations. State any other assumptions you make. Is the difference in net income material?**

WorldCom's revenues for 2001 totaled \$35,179 million. It reported operating expenses of \$11,046 million in selling, general, and administrative; \$14,739 million in line costs; and \$5,880 million in depreciation and amortization. As discussed in previous sections, line costs were understated by \$3,055 million, and depreciation was overstated by \$83 million (the portion of that improperly capitalized \$3,055 million that was allocated to 2001). As a result, the true line cost amount should have been  $\$14,739 + \$3,055 = \$17,794$  million, and likewise, depreciation should have been  $\$5,880 - \$83 =$

\$5,797 million. This increases total operating expenses from \$31,665 million to \$34,637 million. Operating income, therefore, is only \$542 million (as opposed to WorldCom's reported \$3,514 million). Accounting for WorldCom's other income and expenses, which remain unchanged, income before taxes and minority interests dips from \$2,393 million to \$(579) million.

WorldCom is able to obtain a slight reprieve when it comes to taxes. Because their income figure is already negative at this point, the 35 percent of that \$(579) million allocated to taxes – that is, \$202.65 million (rounded in these calculations to \$203 million for simplicity) – becomes a tax benefit. In other words, because WorldCom is reporting a loss, a tax liability should not worsen their loss. This allows WorldCom's income before minority interests to become \$(376) million, and subsequently, upon accounting for said minority interests of \$35 million, the firm's ultimate net loss would total \$(341) million.

With the improper capitalization, WorldCom reported net income in 2001 of \$1,501 million. The corrected figure, meanwhile, would have been around \$(341) million – a net loss. This is indeed a material difference, and a significant one at that: a \$1,842 million decrease! It is no wonder that WorldCom subsequently filed for bankruptcy.

The preceding calculations are also presented in a streamlined income statement-style format in Table 6-1.

**Table 6-1.** WorldCom 2001 Corrected Net Income Calculations

<b>(data in millions)</b>	<b>As Reported</b>	<b>Adjustments</b>	<b>Corrected</b>
Revenues	\$ 35,179		\$ 35,179
Operating Expenses:			
Line Costs	14,739	add 3,055	17,794
Selling, General, and Administrative	11,046		11,046
Depreciation and Amortization	5,880	less 83	5,797
Total Operating Expenses	31,665		34,637
Operating Income	\$ 3,514		\$ 542
Other:			
Interest Expense	1,533		1,533
Miscellaneous Income	412		412
Income before Taxes and Minority Interests	\$ 2,393		\$ (579)
Income Taxes	927	adjusted*	203
Income before Minority Interests	1,466		(376)
Minority Interests	35		35
Net Income (Loss)	\$ 1,501		\$ (341)
* - assuming 35% rate; becomes tax benefit			
Difference in Net Income =			\$ (1,842)

## CASE STUDY 7 – STARBUCKS CORPORATION

by  
Nicholas Fenske

March 6, 2019

## **Abstract**

The purpose of this case study is stated quite succinctly in the instructions packet: “Understanding Financial Statements.” Specifically, given some year-end financial statements for the Starbucks Corporation, we were told to create common-size income statements and balance sheets and use those, as well as the other information provided, to analyze key questions regarding Starbucks’ operations. Personally, I do not drink coffee, so I am not quite as fascinated with Starbucks as some of my classmates... but regardless, I found it interesting to take a closer look at their financial statements with this case.

For example, it just so happens that in the year 2013 – which this case uses as its primary focus – Starbucks just barely missed reporting a net loss. For a company like Starbucks, which I imagine will exist until the end of time with a location on every corner, this was shocking. But if you did not take a close look at its financial statements, you would not realize this fact. This is just one of the many reasons why I enjoy these case studies; they allow us to dig into information that the general public may not be aware of, and make use of the accounting knowledge we are learning in our classes to investigate further. Similarly, I appreciate the ability to put to use other skills we are learning as well, such as those regarding Excel: a program I was relatively unfamiliar with prior to becoming an accounting major. I must say, I even enjoy doing these write-ups... not only do I feel they help elevate my professional writing “voice,” I was also able to hide a pun in this one. (Enjoy!) To be sure, these cases are great opportunities.

**7-1. What is the nature of Starbucks' business? That is, based on what you know about the company and on the accompanying financial statements, how does Starbucks make money?**

Starbucks is a well-known brand name for coffee products nationwide. As is stated in Note 1 to their financial statements, the company produces and sells its beverages and foods at both its company-operated stores and “through other channels such as licensed stores, grocery, and national foodservice accounts.” Starbucks makes money through the sales made via these avenues. In other words, Starbucks is both a retailer and a wholesaler.

**7-2. What financial statements are commonly prepared for external reporting purposes? What titles does Starbucks give these statements? What does “consolidated” mean?**

Financial statements commonly prepared for external reporting purposes include the balance sheet, the income statement, the statement of cash flows, and the statement of equity. Starbucks generally follows these same titles with the exception of the income statement, which it calls the statement of earnings. Additionally, Starbucks prefixes each statement title with the word “consolidated.” This simply indicates that, as is mentioned in Note 1, the financial statements “reflect the financial position and operating results of [both] Starbucks [and] wholly owned subsidiaries and investees that we control.”

**7-3. How often do publicly traded corporations typically prepare financial statements for external reporting purposes?**

Publicly traded corporations prepare financial statements four times per year: at year-end, and following the end of each of the remaining three quarters of the year.

**7-4. Who is responsible for the financial statements? Discuss the potential users of the Starbucks financial statements and the type of information they are likely interested in.**

Internal management is responsible for preparing the company's financial statements, and external auditors then review the financial statements in order to provide an opinion on their accuracy (as will be discussed further in Section 7-5). Generally, parties interested in financial statement information include present and potential investors and creditors of the company. For Starbucks, this would include, for example, shareholders (who may be interested in the performance of the company since they are considered the owners via their stocks) and lenders (who would want to examine Starbucks' solvency, or ability to meet its debt payments). Other users could include virtually anyone Starbucks does business or is involved with, including its employees, customers, suppliers, and even competitors.

**7-5. Who are Starbucks' external auditors? Describe the two "opinion" letters that Starbucks received in 2013. In your own words, what do these opinions mean? Why are both opinions dated several months after Starbucks' year-end?**

Starbucks' external auditors are Deloitte & Touche LLP – specifically, the Seattle, Washington office. The two opinion letters Deloitte provided following year-end 2013 each reflect a different external opinion: one covers the accuracy of the financial statement information, and the other concerns internal controls. That is, external auditors' opinion letters are meant to ensure financial statement users – and, indeed, the company itself – that there are no misstatements in the financial statements, and that the company is employing effective internal controls over financial reporting. The two-month delay between Starbucks' year-end and Deloitte's opinions reflects the time Deloitte took in analyzing the financial statements and internal controls in order to form their opinions. Both of Deloitte's opinions are unqualified, which means that they found the financial information to be presented fairly and the internal controls administered effectively.

**7-6. Use a spreadsheet to construct common-size income statements and balance sheets for both 2013 and 2012. Common-size income statements scale each income statement line item by total *net* revenues (sales). Common-size balance sheets are created by dividing each figure on a given year's balance sheet by that year's total assets.**

These are presented on the following pages as Tables 7-1 and 7-2, respectively.



**Table 7-1. Common-Size Income Statement**

<b><u>Fiscal Year Ended</u></b>	<b>Sep. 29, 2013</b>	<b>Sep. 30, 2012</b>
Net revenues:		
Company-operated stores	79.19%	79.21%
Licensed stores	9.14%	9.10%
CPG, foodservice and other	<u>11.67%</u>	<u>11.69%</u>
Total net revenues	100.00%	100.00%
Cost of sales including occupancy costs	42.86%	43.71%
Store operating expenses	28.78%	29.46%
Other operating expenses	3.07%	3.23%
Depreciation and amortization expenses	4.17%	4.14%
General and administrative expenses	6.30%	6.02%
Litigation charge	<u>18.70%</u>	<u>0.00%</u>
Total operating expenses	103.87%	86.57%
Gain on sale of properties	0.00%	0.00%
Income from equity investees	<u>1.69%</u>	<u>1.58%</u>
Operating income	-2.19%	15.02%
Interest income and other, net	0.83%	0.71%
Interest expense	<u>-0.19%</u>	<u>-0.25%</u>
Earnings before income taxes	-1.54%	15.48%
Income taxes	<u>-1.60%</u>	<u>5.07%</u>
Net earnings including noncontrolling interests	0.06%	10.41%
Net earnings attributable to noncontrolling interest	<u>0.00%</u>	<u>0.01%</u>
Net earnings attributable to Starbucks	<u>0.06%</u>	<u>10.40%</u>

**Table 7-2.** Common-Size Balance Sheet

	Sep. 29, 2013	Sep. 30, 2012
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	22.36%	14.46%
Short-term investments	5.71%	10.32%
Accounts receivable, net	4.87%	5.91%
Inventories	9.65%	15.10%
Prepaid expenses and other current assets	2.50%	2.39%
Deferred income taxes, net	<u>2.41%</u>	<u>2.90%</u>
Total current assets	47.51%	51.09%
Long-term investments	0.51%	1.41%
Equity and cost investments	4.31%	5.60%
Property, plant and equipment, net	27.79%	32.35%
Deferred income taxes, net	8.40%	1.18%
Other assets	1.61%	1.76%
Other intangible assets	2.39%	1.75%
Goodwill	<u>7.49%</u>	<u>4.86%</u>
<b>TOTAL ASSETS</b>	<u>100.00%</u>	<u>100.00%</u>
<b>LIABILITIES AND EQUITY</b>		
Current liabilities:		
Accounts payable	4.27%	4.84%
Accrued litigation charge	24.17%	0.00%
Accrued liabilities	11.02%	13.79%
Insurance reserves	1.55%	2.04%
Deferred revenue	<u>5.68%</u>	<u>6.21%</u>
Total current liabilities	46.69%	26.89%
Long-term debt	11.28%	6.69%
Other long-term liabilities	<u>3.11%</u>	<u>4.20%</u>
Total liabilities	61.08%	37.77%
Shareholders' equity:		
Common stock	0.01%	0.01%
Additional paid-in capital	2.45%	0.48%
Retained earnings	35.86%	61.40%
Accumulated other comprehensive income	<u>0.58%</u>	<u>0.28%</u>
Total shareholders' equity	38.90%	62.16%
Noncontrolling interests	<u>0.02%</u>	<u>0.07%</u>
Total equity	<u>38.92%</u>	<u>62.23%</u>
<b>TOTAL LIABILITIES AND EQUITY</b>	<u>100.00%</u>	<u>100.00%</u>

**7-7. Refer to Starbucks' balance sheet for fiscal 2013 (the year ended September 29, 2013).**

**a) Demonstrate that the accounting equation holds for Starbucks. Recall that the accounting equation is:  $\text{Assets} = \text{Liabilities} + \text{Equity}$ .**

Because both total assets and total liabilities and equity for each of the two fiscal years total 100 percent, the accounting equation holds.

**b) What are Starbucks' major assets? Calculate the proportion of short-term and long-term assets for 2013. Does this seem appropriate for a company such as Starbucks?**

Starbucks' major assets are property, plant, and equipment; cash; and inventory. With the exception of the inventory account in fiscal year 2013 (which falls short by only 0.35 percent), each of these line items represents a double-digit percentage of total assets.

For 2013, the percentage of short-term assets is 47.51 percent (as shown in Table 7-2), and the percentage of long-term assets is 52.49 percent (100 percent minus short-term assets). Having an approximately half-and-half setup like this does indeed seem appropriate for Starbucks; it makes sense because one would expect Starbucks to be nearly equally invested between short-term items such as the inventory for all of its stores, and long-term items such as the store buildings themselves.

**c) In general, what are intangible assets? What is goodwill? What specific intangible assets might Starbucks have?**

Intangible assets are those assets which have no true physical substance, but still hold value for the company. Examples include patents and copyrights, among many others. Goodwill is an intangible asset that develops when one company purchases another and pays more for the acquired business than the fair market value of its assets and liabilities (in other words, goodwill is the excess of the purchase price over the fair values). Obviously, Starbucks has goodwill present on its balance sheet; other intangible assets of Starbucks undoubtedly include the chain's intellectual property, such as its brand name, logo, and trademarks.

**d) How is Starbucks financed? What proportion of total financing comes from non-owners?**

Given the presence of both debt and stock on its balance sheet, Starbucks uses both of these methods in order to obtain financing. However, since common stock only represents 0.01 percent of total liabilities and equity for both years represented in Table 7-2, it is clear that Starbucks mainly relies on debt financing. As indicated in the table, long-term debt – i.e., financing from non-owners – in 2012 comprises 6.69 percent, and in 2013 11.28 percent, of total liabilities and equity.

In addition to debt and equity, Starbucks likely uses its retained earnings for financing purposes, given the high percentage amount that that account represents.

**7-8. Refer to Starbucks' statement of earnings for fiscal 2013 (the year ended September 29, 2013) and to the common-size income statement you developed in Section 7-6, above.**

**a) Review the revenue recognition policies of Starbucks discussed in Note 1 (Summary of Significant Accounting Policies). Does Starbucks record revenue when they receive cash from their customers (cash-basis accounting) or do they follow a different rubric (for example, accrual accounting)? How does Starbucks record revenue on stored value cards (i.e., gift cards)? What challenges in measuring revenue do you observe? That is, are there any significant judgments management needs to make in recording sales revenues at Starbucks?**

As one would expect, for in-store sales Starbucks records revenue upon receipt of cash from its customers. However, for the rest of its operations, Starbucks records revenue on an accrual basis. For example, Note 1 indicates the following: sales of products to licensees are recognized upon shipment... sales of products to retailers and manufacturers are recognized when those parties receive the items... and royalty revenues are recognized monthly when earned. In other words, for these transactions Starbucks records revenue before it receives cash. This creates accounts receivable.

According to Note 1, "Revenue from our stored value cards...are recognized when redeemed or when the likelihood of redemption, based on historical experience, is deemed to be remote," despite the fact that these cards have "no expiration dates." This presents an obvious revenue recognition challenge in that Starbucks management must employ significant judgment in determining what factors make gift card redemption

remote. It is stated in Note 1 that one factor in this evaluation is “long periods of inactivity,” but even then, because the cards have no expiration dates, a customer might redeem the card balance after revenue from that card has already been recognized – presenting an additional challenge to Starbucks.

**b) What are Starbucks’ major expenses?**

Starbucks’ major expenses are cost of sales including occupancy costs and store operating expenses, which together comprise over 70 percent of total net revenues in both 2012 and 2013. It is assumed that the major costs of Starbucks’ principal operations, such as beverage/food item costs as well as labor costs, are included within these line items.

**c) Were there any significant changes in the cost structure during the most recent year?**

Yes. As Note 1 reports, “Effective at the beginning of fiscal 2012, we implemented a strategic realignment of our organizational structure designed to accelerate our global growth strategy.” In connection with this, Starbucks’ cost structure was altered so as to redirect accounting for “certain indirect overhead costs” to the “corporate level, [where they] are reported within unallocated corporate expenses. These expenses have therefore been removed from the segment level financial results,” where they were previously allocated prior to 2012.

Starbucks makes clear that this reallocation had “no impact on consolidated net revenues, total operating expenses, operating income, or net earnings.”

- d) In fiscal 2013, Starbucks separately reported a litigation charge and included it in operating income. Why didn't the company just include this amount within the line item for general and administrative expenses? Why is it an operating expense?**

The litigation charge was not included within general and administrative expenses because it is a large and unusual amount; effectively “burying” it among all the other routine general and administrative expenses would not meet the requirements of full disclosure. Additionally, it was classified as an operating expense because it relates to Starbucks’ operations. The “Commitments and Contingencies” section of Starbucks’ full fiscal 2013 financial statement notes as found on SEC.gov describes the source of the litigation charge: “a federal court action against Starbucks, entitled *Kraft Foods Global, Inc. v. Starbucks Corporation*,” from which an “arbitrator ordered Starbucks to pay Kraft \$2,227.5 million in damages”... which, when combined with “estimated prejudgment interest” of \$556.6 million, resulted in the recorded litigation charge of \$2,784.1 million.

- e) Was the company profitable during 2013? During 2012? Explain your definition of “profitable.”**

If one were to look at net income alone as the sole measure of profitability, he or she would say that Starbucks was profitable in both 2013 and 2012 because the company reported positive net income during both fiscal years. However, by the fact that Starbucks’ 2013 net income was considerably lower than that of 2012 (\$8.3 million versus \$1,383.8 million), it is clear that some event in 2013 drastically impacted

Starbucks' earnings. Indeed, this would be the litigation charge discussed in the previous question; as a matter of fact, said litigation charge resulted in Starbucks' 2013 operating expenses exceeding its net revenues (as can be seen in Table 7-1: 103.87 percent versus 100 percent, to be exact). In other words, Starbucks reported an operating loss (and, likewise, a negative EBT figure) for 2013. Only because Starbucks's income tax expense is added back because of its loss, does net earnings for the year actually become nonnegative. So, from this definition, Starbucks was in fact not profitable during 2013.

**7-9. Refer to Starbucks' fiscal 2013 statement of cash flows.**

**a) Compare Starbucks' net earnings to net cash provided by operating activities and explain the difference.**

Net earnings as reported on Starbucks' income statement is \$8.3 million, whereas net cash provided by operating activities as reported on the statement of cash flows is \$2,908.3 million. These figures do not represent the same thing. Net *earnings* is revenue minus expenses; generally speaking, it is a profitability measure (although, as mentioned in the last section, even then it is not a guarantee that the company is profitable!). Net *cash flows*, meanwhile, represents all of the literal cash that flowed into and out of the company during the year – in the operating activity this includes transactions involving the collections of accounts receivable, the payments of accounts payable, the purchases of inventory, etc., but *no* noncash items. (There are also investing and financing categories.)

Thus, where the income statement and net earnings include revenue and expense figures that were calculated on an accrual basis, the statement of cash flows and net cash



provided by operating activities deal exclusively with cash, adding back noncash items to the beginning net earnings figure. Noncash items are those such as depreciation and amortization expense, as well as – for fiscal 2013 in particular – the sizeable litigation charge discussed in the previous sections. In other words, a majority of the difference between net earnings and net cash flows for 2013 can be attributed to these two noncash items and how they are differently accounted for in each of these two financial statements.

**b) How much cash did Starbucks use for expenditures for property, plant, and equipment during fiscal 2013?**

According to the statement of cash flows, Starbucks spent \$1,151.2 million on additions to property, plant, and equipment in fiscal 2013.

**c) What amount of dividends did Starbucks pay during the year? How does this amount compare to the amount of dividends declared as shown in the statement of equity?**

Per the statement of cash flows, Starbucks paid \$628.9 million in cash dividends during 2013. The statement of equity, meanwhile, reports that in 2013 \$668.6 million in dividends were declared. These two figures are obviously not equal. The difference likely arises from the fact that all dividends declared may not have been paid out in cash yet. That is, Starbucks probably has \$39.7 million remaining in a dividends payable account.

**7-10. Several notes to the financial statements refer to the use of “estimates.”**

**Which accounts on Starbucks’ balance sheet require estimates? List as many accounts as you can. Are any accounts estimate-free?**

Accounts on Starbucks’ balance sheet that surely require estimates include the intangible assets, as well as goodwill; as discussed earlier, these items have no physical substance, so valuing them poses a challenge and clearly requires judgment. Accounts receivable, while not intangible, also includes estimates because it is presented net of the allowance for doubtful accounts, which is an estimate. Similarly, property, plant, and equipment is reported net of depreciation, which is an estimate. Inventory, too, likely deviates at least somewhat from its true value based on the valuation method Starbucks uses.

Accounts that do *not* require estimates likely include the equity accounts; some, if not all, of the liability accounts; and the assets prepaid expenses and cash, among others.

## CASE STUDY 8 – BP P.L.C.

by  
Nicholas Fenske

April 3, 2019

## **Abstract**

This case study focuses on the infamous BP oil spill along the Gulf Coast in 2010. It is obvious to many that this incident resulted in countless negative, costly repercussions to BP, including a barrage of lawsuits. What may not be as intuitive, though, is that, per the standards of accounting, BP had to accrue what are called “contingent liabilities” for a great number of these repercussions. Contingent liabilities are a tricky subject because, as the name implies, they are *contingent* on some future event – that is, the amount at stake, or even the fact of whether a payment will need to be made at all, is uncertain. Thus, determining whether or not to accrue a liability for such an event requires a lot of judgment and estimations. Such work is complicated, and while it may seem risky to record losses that have yet to happen, the rationale is to recognize contingent liabilities in the period in which they incur so as to accurately reflect the company’s financial position.

For me personally, this case was rather challenging. There are no true financials involved – just qualitative reasoning, regarding contingent liabilities as they relate to the BP oil spill. Not only is the subject itself a difficult one – it is hard to speak in a general manner when referring to an accounting concept that is inherently judged on a case-by-case basis! – but an additional issue I faced was determining how the concept is treated differently under BP’s accounting standard of IFRS vs. the U.S. GAAP. As a result, I can certainly see why an event like this would frustrate auditors and lawyers: I am certain I barely even scratched the surface of this topic, yet I already found myself overwhelmed!

**8-1. What is a contingent liability? Explain, in your own words, when a company would record a contingent liability (i.e. a contingent loss) on its books. List some types of contingent liabilities. Do companies ever record contingent assets (i.e. contingent gains)?**

A contingent liability arises from some future event that a company expects it will have to provide payment for, but which is not yet set in stone (i.e. uncertainty exists as to whether or not the event will actually occur). Under U.S. GAAP, loss contingencies are recorded when occurrence of the events in question is probable (highly likely), *and* the amount at stake is reasonably estimable. If the event is only reasonably possible or remote, or if an amount to record cannot be reasonably estimated, a contingent liability should not be accrued. (However, footnote disclosure is still required for reasonably possible losses, and for losses which are either probable or estimable but not both.)

BP, the subject of this case study, uses IFRS as its accounting standard. IFRS also requires an event to be probable, but “probable” in this context is generally considered to be more inclusive than GAAP (i.e. any contingent loss above 50 percent likely – “more likely than not” – would need to be accrued). IFRS also requires estimates to be reliable.

Examples of contingent liabilities include losses related to future or existing lawsuits/litigation, warranties, rebates, and the like. Unlike contingent losses, in keeping with the conservatism of accounting, companies never record contingent gains (but may disclose them in the footnotes, if they are highly likely to occur).

**8-2. Product warranties are a common contingent liability. Consider a piece of equipment such as a telescopic joint, which BP purchases from GE Oil and Gas. The telescopic joint compensates for heave and offset on drilling vessels and is sold with a two-year warranty against defects. From BP's perspective as the purchaser of the telescopic joint, what is a product warranty? From the perspective of GE Oil and Gas, the manufacturer of the telescopic joint, what is a warranty?**

Because this product warranty only protects against defects (i.e. ensures that the product condition meets agreed-upon specifications) and does not specify that GE is responsible for providing any additional services such as repairs, it is considered an assurance-type warranty (as opposed to a service-type warranty). Assurance-type warranties do not represent separate performance obligations in a contract; therefore, an assurance-type warranty's selling price is included with the selling price of the product to which the warranty is attached.

For BP – the buyer – this means that the warranty is included in the cost of the asset on its books. On the other hand, GE – the seller – needs to account for the fact that BP might find defects with the telescopic joint in the future, and subsequently exercise its assurance-type warranty. As a result, GE must record an expense and an accrued contingent liability related to future costs it expects to arise from the warranty agreement. This allows GE's books to reflect the fact that it has an outstanding warranty arrangement that may be called upon for use in the future, resulting in costs to the company. If GE were not to disclose this loss contingency, it would be understating its liabilities, which could mislead users of its financial statements.

**8-3. What judgments does management need to make to account for contingent liabilities in general and accrued warranty costs in particular? How does a claim for damages resulting from the Deepwater Horizon oil spill differ from a warranty claim on a piece of equipment such as a telescopic joint?**

As described previously, with regard to recording contingent liabilities management must make judgments as to the likelihood of the underlying event bringing rise to the liability taking place, as well as the amount of the loss expected to result from the event. A major point of contingent liability accrual is ensuring that the liability is recorded in the period in which it is incurred; this way, it is correspondingly expensed in the same period, ensuring that the cost is accounted for in the proper year's income calculation.

For accrued warranty costs in particular, because the warranty agreements are usually for a relatively short period of time and costs can be estimated with a fair amount of precision (especially if the company deals with selling warranties on a regular basis), judgment can be straightforward. Given the example of the telescopic joint, for instance, estimates could include how many parts of the equipment will be defective, as well as the cost of repair for each part. For other loss contingencies, however – such as a claim for damages resulting from the BP oil spill, in this case – judgments can be much more complex, significantly differing from product warranties. For one thing, the costs have a much greater element of uncertainty to them, because they are highly dependent on the nature of whatever is damaged as well as the extent of the damage. Similarly, it is unlikely that a company will accrue loss contingencies for damage claims unless a disaster has actually taken place, simply because it is almost impossible to estimate when

such a disaster will occur. Moreover, given that other parties may share in the operation – in BP’s case, the Deepwater Horizon rig was owned by Transocean Holdings LLC and leased to BP; another company, Halliburton, was involved in its operation as well – judgment would have to include who to share any charges amongst, how to divide those charges up, and how to prove gross negligence, particularly in the event of a lawsuit (such as could be commenced by the US Justice Department, seeing as how the oil spill violated the Clean Water Act and the Oil Pollution Act). Lawsuits will be discussed further in the following sections.

**8-4. Describe some of the estimates that BP must make to account for the contingencies associated with the Deepwater Horizon oil spill. By way of comparison, the Exxon Valdez oil spill took place on March 24, 1989. Litigation continues as of early 2011.**

Obviously, a disaster of this magnitude results in significant damage and losses to affected parties. A discussion of such affected parties is provided in the next section, but suffice to say that there are many estimates that BP must make for each and every one of these claims. For example, as discussed in the previous section, it is likely that many parties will seek to obtain damage claims from BP via their insurance companies. Also, BP will undoubtedly need to set aside money for the inevitable cleanup of the spill, involving estimates of the extensive costs this process will involve. Another major threat to BP is a large number of lawsuits. For those claims that arise following the oil spill, BP must estimate the amount to be recorded as a contingent liability, which in the case of the lawsuits becomes a significantly more complex calculation given the multifaceted nature



of litigation. Additionally where lawsuits are concerned, BP must also estimate the probability of losing the suit (for if they are likely to win, they will not have to pay out anything, and thus would not have a loss), which is by no means easy or straightforward.

Moreover, BP must also consider claims against them that may not even have materialized yet. Again, this refers back to the provision that companies estimate the probability of a future event occurring, and a loss resulting from it. Taking the litigation example further, this means that BP must examine all parties who may potentially sue them, estimate the probability of such lawsuits occurring, and only *then* launch back into that same process of estimating the outcome and costs. The cost estimation, too, can be complicated, especially if there are a range of potential costs; if there is no one estimate better than another, GAAP requires that the minimum cost be accrued, while IFRS requires accrual of the midpoint of the range. In any case, given the Exxon information, there is no doubt that such estimations will prove to be a headache to BP for many years.

**8-5. If you were the auditor for BP, working with lawyers to come up with contingent liabilities, how would you draw the boundary around contingent losses? List possible affected industries or parties that might sue BP. For which potential lawsuits could accrual of a contingent liability be reasonable?**

In order to complement the previous section, I will begin with a list of affected industries. The legal website Nolo has an entire page dedicated to “BP Oil Spill Lawsuits and Legal Issues,” written by David Goguen, J.D. and last updated on December 30,

2015. On this page is a subsection examining the various, multiple parties who sued BP in the aftermath of the Deepwater Horizon incident. Nolo sorts through the different kinds of lawsuits as follows:

- *“lost business profits and individual income losses,”* suits originating from those who live and/or work along the Gulf Coast and lost money due to a decline in tourism to the region resulting from the oil spill – parties such as hotel or rental property owners, operators of attractions and other businesses in the region, and those who depended on the marine life, like fisherman and the seafood industry...
- *“environmental damage,”* lawsuits which sought to have BP provide payment for the damage inflicted to the coastline and wildlife...
- *“property damage,”* seeking payment for commercial, residential, and undeveloped property damaged in the spill...
- *“health problems and health risks from oil and chemical dispersants,”* involving individuals who live in the region and were subjected to the negative health consequences of BP’s oil spill just by proximity...
- *“injuries and health risks from cleanup,”* involving individuals who were directly exposed to negative health consequences as a result of their employment by BP to clean up the spill...
- *“wrongful death and injury claims by rig workers and their families,”* lawsuits carried out in the names of the eleven workers killed in the incident as well as similar negligence suits from workers who survived but still suffered injuries...
- and *“BP shareholder lawsuits,”* filed on behalf of investors concerned both that they were misled, and about the drop in BP’s stock price.

While the above italicized categories mainly represent the topics of the lawsuits BP would find itself subject to, said categories, by their natures, also indicate which parties and/or industries were likely to be involved in the lawsuits. In short, there are many possible litigants for an incident like BP's oil spill, ranging from business owners who lose profits or whose properties are damaged, to citizens who are exposed to toxic chemicals or sue for wrongful death or negligence, to shareholders and even the US government.

As for which of these lawsuits would reasonably necessitate accrual of a contingent liability... that is harder to say. Generally speaking, as discussed many times to this point, accrual of a contingent liability is not necessary (or, indeed, permitted) if the event is neither probable nor estimable in terms of a dollar amount. But, if BP and its lawyers determine an existing lawsuit has merit – or a nonexistent lawsuit is likely to arise from one of the aforementioned affected parties, also with merit – and it is probable BP will lose the case, accrual of a contingent liability seems entirely appropriate. In fact, the only situations which may necessitate *no* contingent liability accruals – besides those which do not meet the accrual requirements but do still require footnote disclosure, of course – are lawsuits that BP believes it will win, or lawsuits that are entirely frivolous and lacking in merit.

The concern, of course, is that BP does not record too many – or too few – loss contingencies. As such, a defined boundary around what to record and what not to record would be extremely helpful. However, I am not sure that such a boundary is entirely possible to create. The whole idea behind loss contingencies, after all, is that each situation is unique, and examined on a case-by-case basis to determine probability and to

estimate cost; it would be impossible to create a standard boundary applicable to all events. With that said, personally, if I were BP's auditor, I would of course follow all of IFRS's provisions regarding contingent liabilities. I would place a strong emphasis on the determination of likelihood and estimation of cost in order to make sure events that are likely to happen (or are already in progress) have reliable costs attached to them and are subsequently accrued in order to best represent BP's financial position (and those that do not fit these standards are dealt with appropriately, whether by footnote disclosure or simple lack of consideration, for those remote probabilities, lawsuits with presumed favorable outcomes, etc.). Given that IFRS seems structured to result in more contingent liability accruals than GAAP, the importance of this task cannot be understated; great care should be placed in these determinations, ideally with the input and consensus of experts, such that all necessary accruals are recorded and all unnecessary accruals are not.

As always, materiality is a key consideration as well. Likewise, particular care should be placed in the evaluation of more immediate, short-term events, as by their nature these inherently harbor less uncertainty than longer-term, future events. As events become more certain, they should be placed under closer scrutiny. And finally, I would require frequent monitoring, such that new information would be regularly examined as it arrives and BP's loss contingencies reexamined and adjusted as necessary. In this way, BP's contingent liability account(s) would be up to date – and making sure none of the information used for estimates and accruals is outdated seems as suitable a boundary as one can provide.

## CASE STUDY 9 – THE WENDY’S COMPANY

by  
Nicholas Fenske

April 10, 2019

## **Abstract**

This case study focuses on Wendy's, and how it accounts for its joint venture with Tim Hortons – known as “TimWen” – using the equity method of accounting. Having just been tested on the equity method a few weeks prior in our Intermediate classes, most of us were familiar with the equity method as we set out to tackle this case. However, I – like most of my classmates, I imagine – was surprised to learn about the additional components of the equity method beyond what we had covered in Intermediate. Where in Intermediate we stuck to the “basics” (which cannot exactly be said to be a breeze in and of themselves!), with this case study we dove much deeper, discussing what happens when an equity investment such as Wendy's investment in Tim Hortons exceeds the actual value of the investor's corresponding share of the investee's stock.

Besides learning new terms (acquisition accounting premium!) and journal entries that account for these fresh concepts, this case also allowed us the chance to thoroughly explore the notes to Wendy's financial statements, in order to pick out and trace back all the relevant information we needed to completely answer the questions presented to us. This was certainly challenging, since I personally feel that I am not well-versed at all in interpreting or analyzing notes to financial statements... but I also feel that that made this case study rewarding, for the exact same reason. Continuing to learn new concepts and to have the ability to explore real-world information (such as digging through the notes to actual companies' actual financial statements), as is often allowed in these case studies, is therefore always beneficial, in my opinion.

**9-1. In general, why do companies enter into joint-venture agreements?**

A joint venture is a strategic business combination between two parties.

Companies may enter into joint ventures for a variety of specific, goal-oriented reasons, but generally speaking, all joint ventures are likely formed so that the participants can gain from the advantages of the joint venture format. First and foremost of these advantages is the fact that a joint venture is *not* a new business entity, meaning unlike a merger or acquisition, it can dissolve in the future if necessary. Likewise, because it is not a separate business entity, it does not need to file taxes or similar regulatory reports.

The format also allows the partners involved to share equally (or at some other decided-upon percentage) in business decisions, in risks, in operations, in profits or losses generated from the venture, etc. Finally, a common reason behind the formation of joint ventures is so that at least one, if not all, of the partners can benefit from the comparative advantage of another. This could involve, for example, physical aspects, such as the use of specialized machinery owned only by one partner; or nonphysical aspects, such as one partner benefitting from the human capital and expertise of another, or using the joint venture as a means of entering into a new market in which the other has already been successful. Ideally, all partners involved see something beneficial arising from their business relationship with the other(s).

**9-2. Consistent with U.S. GAAP, Wendy's uses the equity method to account for its joint venture in TimWen. Briefly explain this accounting method. In your answer, be sure to comment on how the investing company accounts for its initial investment and any subsequent income and dividend activity of its investee.**

In addition to households and other parties, sometimes stock in a corporation is purchased by a fellow corporation. In this case, Wendy's has purchased stock in Tim Hortons (as represented through their joint venture, TimWen). Because shares of stock represent ownership, this investment represents an asset to Wendy's. Therefore, it accounts for its shares in an asset account called Equity Investments.

If one party holds enough shares of stocks in another corporation, that investor can use their power relative to other stockholders to control certain aspects of their investee. If the party holds over 50 percent of shares, they are said to have a controlling interest, which results in consolidation; and if they hold less than 20 percent, they are presumed to have little control and thus account for the investment under what is called the fair value method. The equity method comes into play when the investor owns between 20 and 50 percent of the investee's stock, and exerts significant influence over the investee. In this situation, Wendy's owns 50 percent of TimWen stock and uses the equity method to account for its investment.

To explain the equity method, it is easier to first explain the fair value method so as to be able to contrast the two. Under the fair value method, the investor records the purchase of the shares once, and any subsequent entries either adjust the investment to its market value or recognize an inflow of cash when dividends on the investment are



received, reflecting the investor's passive interest. The equity method, on the other hand, takes into account the fact that the investor owns a significant amount of the investee's stock; therefore, it stands to reason that the investor should share in a portion of the investee's profits and losses. Specifically, this portion is equal to the proportion of the investee's stock that the investor owns – which, again, is 50 percent in Wendy's case.

So, when TimWen reports net income for a given year, Wendy's would recognize 50 percent of that figure by increasing (debiting) its original Equity Investment account, and subsequently recognizing (crediting) Equity Income. This entry acknowledges that the profit generated by TimWen increases the value of Wendy's investment in TimWen. Similarly, when TimWen pays out dividends, Wendy's receives (debits) Cash... but instead of crediting Dividend Revenue as in the fair value method, it instead deducts that amount from the original Equity Investment account: recognition of the fact that, to TimWen, payment of dividends is not a revenue but an expense. In this way, the Equity Investment account on Wendy's books, under the equity method, mirrors the rises and falls associated with TimWen's income recognition and dividend distributions.

**9-3. When a company purchases shares (ownership) in another company, the investment amount may exceed their share of the book value of the underlying net assets of the investee. How does the investing company account for this excess amount under the equity method?**

As noted in the previous section, the investor (Wendy's) accounts for their significant share in their investee's (TimWen) stock by debiting Equity Investments and

crediting Cash. This entry is made for the purchase price that Wendy's pays for 50 percent of TimWen's stock. However, it is entirely possible that Wendy's pays an amount greater than what 50 percent of TimWen's stock is actually worth. One could, in essence, say that in this scenario Wendy's pays a premium of sorts... and, as a matter of fact, this excess amount is indeed known as an acquisition accounting premium.

Under the equity method, the investor would split this premium into two components. First, a portion would be used to write up its investee's identifiable assets to their fair values. (The investee, of course, only records their assets at book value, or cost less depreciation. Liabilities are normally reported at fair value, but in the event that some are not, those would need to be marked up as well.) Any remaining portion of the acquisition accounting premium not used for this purpose would simply be treated on the investor's books as goodwill.

Goodwill is tested annually for impairment, but is not amortized. On the other hand, the portion of the premium used to write up the investee's assets *will* need to be amortized. This is because the corresponding assets that were written up to their fair values remain in use... and property, plant, and equipment that are in use all have useful lives over which they are to be depreciated. The challenge here arises from the fact that, while the assets in question belong to the *investee*, it is only the *investor's* books that reflect the write-up. Therefore, it is the *investor* who must recognize systematic depreciation on the relevant portion of the acquisition accounting premium. Because depreciation represents a decrease in value, the investor records this decrease directly to its Equity Investment account via a credit, and similarly decreases (debits) Equity Income to recognize the corresponding depreciation expense effect.

**9-4. Consider the information in Note 8. What amount did Wendy's include on its 2012 and 2011 balance sheets for their equity method investments? Where does this appear on Wendy's consolidated balance sheet?**

According to Note 8, the end-of-period balance for Wendy's equity investment in TimWen was \$89,370 in 2012, and \$91,742 in 2011 (these and all subsequent figures are in thousands unless otherwise specified).

Besides TimWen, Wendy's has a number of other investments as well; among them are several cost investments, as well as one additional equity investment, a joint venture in Japan. For both years, the TimWen equity investment amounts were included on Wendy's consolidated balance sheet within the "Investments" line item. However, the equity investment for the joint venture in Japan was only included in Investments on the balance sheet in 2011; in 2012, because this account ended the year in a loss position (credit balance), Wendy's chose to include it in "Other liabilities" instead.

**9-5. Using information in Note 8, compare the amount recorded for Wendy's investment in TimWen at December 30, 2012 with Wendy's 50 percent share of TimWen's equity at December 30, 2012. What accounts for the difference between these two amounts?**

Within Note 8, Wendy's provides a summary balance sheet for TimWen, which lists TimWen's equity ("Partners' equity") at year-end 2012 as being worth \$70,565. Because Wendy's owns 50 percent of TimWen's equity, their investment is worth half of this amount, or \$35,283. As noted in the previous section, however, Wendy's recorded a

year-end 2012 balance of \$89,370 for their equity investment in TimWen. This results in a discrepancy of \$54,088.

This difference is the acquisition accounting premium discussed back in Section 9-3. It is calculated as the excess of Wendy's recorded Equity Investment account balance for their share in TimWen over the actual worth of 50 percent of TimWen's stock. As Note 8 explains, "The carrying value of our investment in TimWen exceeded our interest in the underlying equity of the joint venture by \$54,088...as of December 30, 2012...primarily due to purchase price adjustments from the Wendy's merger."

**9-6. Consider the information disclosed in Note 8 regarding Wendy's investment in the TimWen joint venture.**

**a) How did Wendy's equity method investment in TimWen affect their earnings before taxes in 2012 and 2011? Where does this appear in Wendy's consolidated statements of operations?**

Note 8 lists "Equity in earnings for the period" from the TimWen joint venture in 2012 as \$13,680 and in 2011 as \$13,505, and tells financial statement users, "Our equity in earnings from TimWen is included in 'Other operating expense, net'" on the income statement (aka statement of operations). It makes sense that this figure is reported with operating line items instead of elsewhere (the "other" items) because Wendy's 50 percent stake in TimWen is strategic and is therefore a component of their full operations.

- b) Prepare the journal entry to record Wendy's share of TimWen's 2012 earnings.**

The journal entry to record Wendy's share of TimWen's net income in 2012 would look like this:

Equity Investment	13,680
Equity Income	13,680

- c) What is the amount of the amortization of the purchase price adjustments in 2012? Prepare the journal entry to record the amortization of the purchase price adjustments for 2012.**

Wendy's reports "Amortization of purchase price adjustments" of \$3,129 in 2012.

The journal entry to record this amortization would look like this:

Equity Income	3,129
Equity Investment	3,129

Therefore, the net Equity Income recorded for the TimWen joint venture in 2012 was  $\$13,680 - \$3,129 = \$10,551$ . It is this net amount which is reflected in "Other operating expense, net" on the income statement (discussed above in part "a").

- d) What amount of dividends did Wendy's receive from the TimWen joint venture in 2012 and 2011? Prepare the journal entry to record the receipt of dividends from TimWen for 2012.**

The "Distributions received" line item in Note 8, representing the dividends Wendy's received from TimWen, bears an amount of \$15,274 in 2012. The journal entry to record these dividends received would look like this:

Cash	15,274	
	Equity Investment	15,274

**9-7. Consider the information in the statement of cash flows.**

- a) The operating activities section of the statement of cash flows reports a negative adjustment for "Equity in earnings in joint ventures, net" of \$8,724 in 2012. Reconcile this amount to the information disclosed in Note 8. Explain why a negative adjustment is made to arrive at net cash from operating activities.**

The starting point for the cash flows from operating activities section of the statement of cash flows is net income, and the idea is to convert net income (or loss), which is calculated on an accrual basis, into net cash provided (or used) by operating activities, which is calculated on a cash basis. As noted previously, regarding Wendy's investment in TimWen, both the equity in earnings for the period and amortization of purchase price adjustments are recorded in the Equity Income account, which flows through to the income statement within "Other operating expense, net." However, neither

of these items involve the actual receipt or disbursement of cash. Therefore, to arrive at net cash from operating activities, the net earnings from Wendy's equity investments must be deducted from net income.

In addition to TimWen, Wendy's also has an equity investment in a Japan joint venture, as discussed in Section 9-4. Note 8 reports equity in losses for the period of \$1,827 for that investment. The net figure of \$8,724 deducted in the statement of cash flows, then, is calculated as Wendy's earnings from TimWen less Wendy's losses from the Japan JV, or  $\$10,551 - \$1,827 = \$8,724$ . (The \$10,551 figure in this calculation was arrived at in part "c" of Section 9-6.)

**b) The operating section also reports a positive adjustment for "Distributions received from joint venture" of \$15,274 in 2012. Reconcile this amount to the information disclosed in Note 8. Explain why a positive adjustment is made to arrive at net cash from operating activities.**

As compared to Wendy's 50 percent share of TimWen's earnings and their amortization of the acquisition accounting premium, which flow through to Wendy's net income, the dividends that Wendy's receives from TimWen are *not* reported in Wendy's net income. However, these dividends *are* received in cash, and therefore, to arrive at net cash from operating activities, they must be added; hence the positive adjustment. The amount of \$15,274 exactly equals the dividends recorded in Section 9-6, part "d." Wendy's received no dividends from its other equity method investment in 2012.

## CASE STUDY 10 – JOHNSON & JOHNSON

by  
Nicholas Fenske

April 19, 2019



## **Abstract**

It is hard to believe that we are down to our final few case studies! Case study number ten, which follows, focuses on Johnson & Johnson as the company, and pension plans as the topic. Specifically, we analyze in-depth how defined benefit plans work and why they work that way, in addition to applying that knowledge to our investigation of Johnson & Johnson's 2007 annual report figures. A change in this particular case study as compared to all the others so far was the instruction to create a flow chart to explain why pension obligations are liabilities. As usual, I probably went overly detailed in my approach, but I must admit I had fun creating the flow chart! Getting to play around with Microsoft Office for an assignment always makes it feel a little less like "work" to me.

Other than that, a major added benefit that I got out of this case was simply the extra time spent on this topic. With the way the second semester of this course has been structured, all but one of our cases have fallen in line one after another, meaning that by the end we will have had five straight case studies in a row. This can be taxing, and also difficult to manage around big assignments in other courses, such as tests or projects. That is why I found it helpful that this case in particular focused on pension plans – it was timed just right to coincide with an Intermediate exam that most of us were studying for at the same time we were working on this case, and on which pension plans are a major topic. In this way, we have been able to have the opportunity to both knock out another case study and, in a roundabout way, put in some extra study time for the Intermediate exam, both as a result of the same assignment. Nice when things work out that way!

**10-1. There are two general types of retirement (i.e. pension) plans – defined benefit plans and defined contribution plans.**

**a) How do these two types of plans differ? Which type does Johnson & Johnson have?**

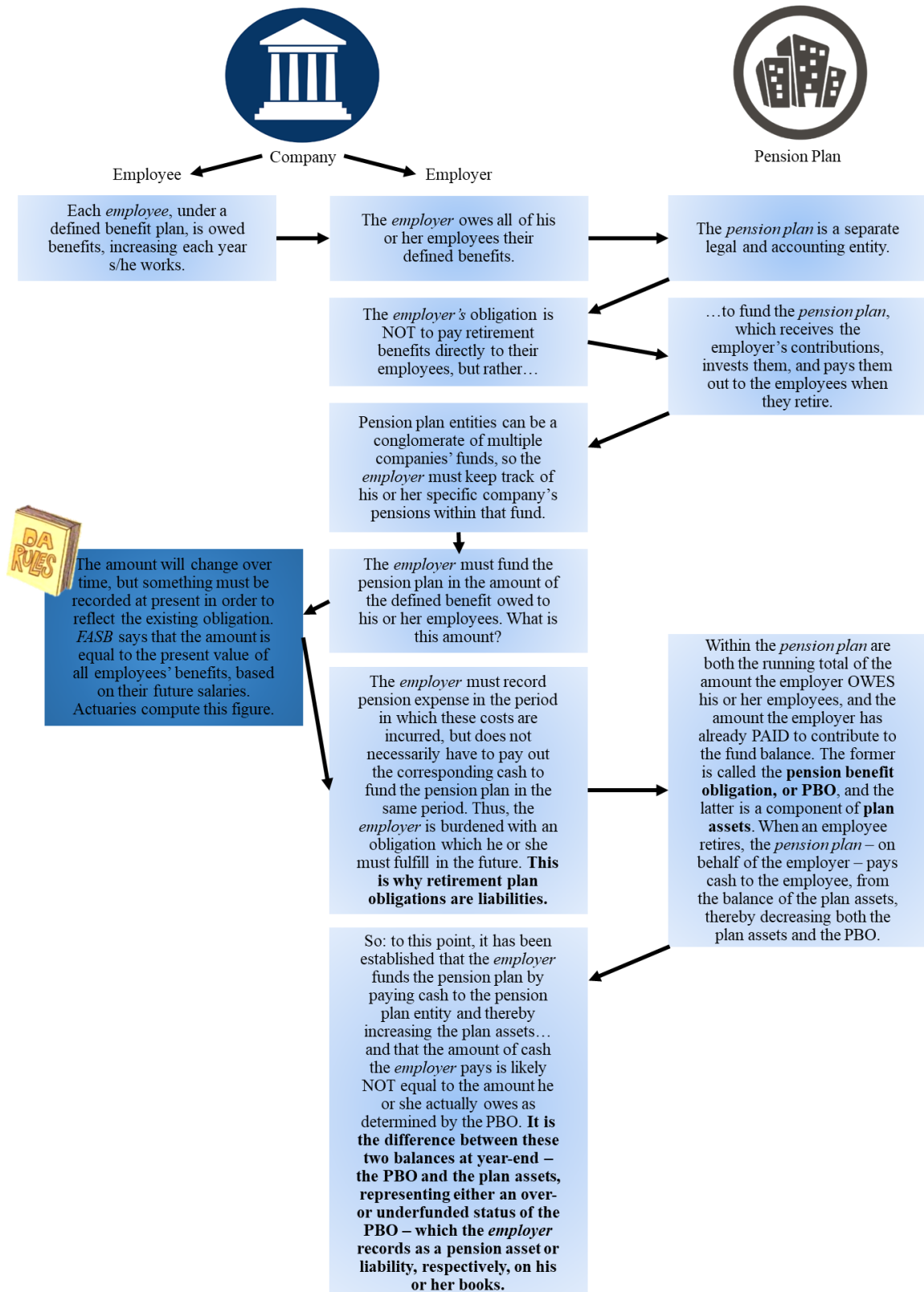
Defined contribution plans require employees to place (contribute) a percentage of their paycheck into the plan each period, and the employer matches that percentage; there is no set amount for which a defined contribution plan must total in the future. In contrast, under a defined benefit plan, the employee is promised a certain payment, based on various factors, upon retirement – as such, it becomes incumbent on the employer to pay enough money into the pension fund to where that defined benefit is able to be met.

Defined benefit plans are thus the more complex of the two, and likewise feature more complex accounting. According to Note 13 of their 2007 Annual Report, Johnson & Johnson has “various retirement and pension plans, including defined benefit, defined contribution and termination indemnity plans,” but it would seem that a majority of their plans (and indeed, the focus of this case) are defined benefit.

**b) Explain why retirement plan obligations are liabilities.**

Figure 10-1, presented on the next page, is a flow chart to identify the parties involved in the process and to explain why retirement plan obligations are liabilities.

**Figure 10-1.** Flow Chart Explaining Why Retirement Plan Obligations Are Liabilities



**c) List some of the assumptions that are necessary in order to account for retirement plan obligations.**

Many assumptions are involved in the accounting for retirement plan obligations, because there is a lot of uncertainty involved. As noted in Figure 10-1, the entire amount that the employer will owe his or her employees changes over time; one could argue it is not set in stone until the day of the payment. However, *something* needs to be recognized at present; FASB says this amount should be the present value of all employees' benefits, based on their future salaries (again, as noted in Figure 10-1). But how is it possible today to know each employee's future salary? Or how long the employee will be with the company, and thus continue to earn benefits, accruing to the pension benefit obligation (henceforth "PBO")? Not only that, but how long will the employee *live*? A loss of life, cruelly enough, would actually represent a gain to the company, as it would lower the amount it has to pay out. These and many other assumptions are handled by actuaries.

An additional assumption involves expected versus actual return on plan assets, a topic which will be discussed further in Section 10-4.

**10-2. In general, companies' pension obligations are influenced each year by four main types of activities: service cost, interest cost, actuarial gains or losses, and benefits paid to retirees. Explain each of the four activities in your own words.**

Service cost is the primary driver of a PBO. It is the additional benefit that an employee earns after working one more year with the company. Interest cost represents a

similarly large component of the PBO. Because the PBO is being accrued rather than paid off today, the PBO generates interest. Both of these activities increase the PBO.

Actuarial gains or losses arise from amendments to previous actuarial assumptions. Actuarial assumptions were discussed in the previous section. One example is prior service cost. Actuaries compute the service cost figure just mentioned in the previous paragraph. It is common for the service cost figure attributed to employees to be retroactively increased. This, in turn, increases the PBO; in other words, it is an actuarial loss (because it increases a liability). Actuarial gains, then, would decrease the PBO.

The benefits paid to retirees component is the main reason why any pension fund exists! As the name implies, this activity occurs when an employee retires and receives their benefits. Once the employee receives their benefits, the obligation for that employee is fulfilled; therefore, when benefits are paid to retirees, the PBO decreases.

**10-3. In general, companies' pension assets are influenced each year by three main types of activities: actual return on pension investments, company contributions to the plan, and benefits paid to retirees. Explain each of the three items in your own words.**

Working in reverse order through these activities, let us first discuss the benefits paid to retirees, since those were just mentioned in the prior section. The benefits being paid obviously must come from somewhere. As noted in Figure 10-1, this “somewhere” is the balance of the plan assets. So, just as benefits paid to retirees decrease the PBO, so too do they decrease the plan assets (just like paying out cash).

Figure 10-1 also discussed how employees never pay pension benefits directly to their employees; rather, they pay the cash to the pension fund, which manages (invests) the cash and pays it out to employees (from plan assets) when they retire. The payment of cash by the employer to the pension plan is what is known as company contributions to the plan. When a company contributes to the pension plan, the plan assets increase.

Just mentioned was the fact that the pension fund entity takes the employer's contributions and invests them. By making these investments, the pension fund hopes to grow the plan assets separately from solely relying on the employer's payments into the fund. In other words, the pension fund hopes to earn a return on the plan assets that it has invested. Actual return on pension investments, then, reflects these earnings, and increases the plan assets.

**10-4. In general, companies' pension expense and pension plan assets both have a "return on plan assets" component. How do the two returns differ? Explain the rationale for this difference.**

The previous section discusses how the plan assets balance contains the actual return earned on plan assets during a period. In contrast, as with several other aforementioned figures, actuaries compute an expected return on plan assets that may or may not end up equaling the actual return (more likely than not, the two will not equal). Like the others, this is simply a figure that the actuaries base on multiple factors and predictions. It is the expected return, and not the actual, which is placed into pension expense each period. Specifically, the expected return amount decreases pension expense.

(In effect, this is similar to recognizing “pension revenue,” except such an account does not actually exist.)

The rationale behind recognizing expected return instead of actual within pension expense is that the actual return is presumed volatile in its effect on earnings (since, after all, pension expense flows through to net income). For example, if actual returns were to be placed in pension expense, an actual return much lower than the company anticipated would lead to a net pension expense figure that would be much higher than anticipated, which could ultimately have a significant negative impact on net income. The use of expected returns, then, is considered to be an income smoothing technique.

Just because the actual return does not flow through to income, however, does not mean that it is not recognized in the employer’s accounts. FASB indicates that the difference between actual and expected returns represents a gain or a loss that should be placed in an other comprehensive income (OCI) account known as OCI – G/L (where “G/L” stands for “Gain/Loss”). If the actual return is greater than the expected, it is a gain, and vice versa.

FASB expects some fluctuations between the expected and actual amounts to exist, and gains or losses recognized in OCI to result. Only when the gains or losses are really material does FASB require the gain or loss to subsequently be recognized in true net income as opposed to OCI. A test called the “corridor approach” is used to determine the materiality. Gains or losses recorded in OCI – G/L each year are collected in a permanent account known as “accumulated other comprehensive income,” or AOCI. The beginning balance of AOCI is compared to the beginning balance of the PBO or plan assets, whichever is larger... and ten percent of that figure (that is, the higher of PBO or

plan assets) is the so-called corridor. If the beginning balance of AOCI falls outside of the corridor, that portion outside of the corridor – deemed the excess amount – must be recognized in net income. So, this excess amount is slowly amortized out of OCI – G/L and into pension expense over the average remaining service life of the employees. Amortization of the excess, rather than direct placement into pension expense in one year only, is yet another income smoothing technique.

(A similar accounting treatment exists for prior service cost amendments, discussed in Section 10-2, except instead of OCI – G/L an additional, separate OCI account is used, known as OCI – PSC, and there is no corridor approach – it is the entire amount which is slowly amortized into pension expense.)

**10-5. Consider Johnson & Johnson’s pension expense detailed on page 61 of the company’s annual report. Note that the company uses the term “net periodic benefit cost” to refer to pension expense.**

**a) How much pension expense did Johnson & Johnson report on its 2007 income statement?**

According to Note 13 on page 61, Johnson & Johnson reported pension expense of \$646 million at year-end 2007. (All figures henceforth are in millions, unless otherwise specified.)



**b) Prepare the journal entry to record the service cost and interest cost portion of the 2007 pension expense.**

Page 62 of their 2007 annual report indicates that Johnson & Johnson's service cost for 2007 amounted to \$597, and their interest cost, \$656. As a result, the combined journal entry to record both of these costs to pension expense would look like this:

Pension Expense	1,253
Pension Benefit Obligation	1,253

**10-6. Consider Johnson & Johnson's retirement plan obligation – that is, the pension liability – as detailed on page 62 of the company's annual report.**

**e) What is the value at December 31, 2007, of the company's retirement plan obligation? What does this value represent? How reliable is this number?**

Johnson & Johnson reports "Projected benefit obligation – end of year" as \$12,002 in 2007. As discussed earlier, this PBO value represents the amount which the employer owes its employees under the pension plan. This number is probably generally reliable; however, as noted before, the fact that it is just an actuarial estimate of the present value of the obligation, rather than being the true obligation total set in stone, means that it is subject to changes in various factors as they arise. So, while it is not exact, the PBO figure can certainly be reasonably considered to be in the "ballpark," so to speak.

- f) What is the pension-related interest cost for the year? Compute the average interest rate the company must have used to calculate interest cost during 2007. Does this rate seem reasonable? Explain.**

As noted in the previous section, interest cost for 2007 was \$656. This interest cost figure is calculated by applying an actuary-supplied settlement rate to the beginning balance of the PBO for the period, *unless* a new actuarial amendment takes place at the beginning of the period, in which case said amendment is also accounted for in the figure used to calculate interest cost.

Johnson & Johnson's beginning PBO balance was \$11,660, and they reported an amendment of \$14; together, this adds up to \$11,674. Algebraically, the settlement rate used to calculate the interest cost of \$656 must be 5.62 percent (656 divided by 11,674). Johnson & Johnson supplies other rates it uses, including both its U.S. and international discount rates, which for 2007 were 6.50 and 5.50 percent, respectively. Because our calculated settlement rate of 5.62 percent falls within these two figures, it seems appropriately reasonable.

- g) What amount of pension benefits were paid to retirees during the year? Did Johnson & Johnson pay cash for these benefits? How do the benefits paid affect the retirement plan obligation and the retirement plan assets?**

Johnson & Johnson reports "Benefits paid from plan" of \$481. As discussed many times to this point, these benefits are not paid in cash by the employer. Instead, it is the

pension plan entity paying out of the balance of the plan assets. Thus, the benefits paid decrease both the plan assets and the PBO.

**10-7. Consider Johnson & Johnson's retirement plan assets – that is, the pension plan asset – as detailed on page 62 of the company's annual report.**

**c) What is the value at December 31, 2007, of the retirement plan assets held by Johnson & Johnson's retirement plan? What “value” is this?**

\$10,469 is the figure reported for Johnson & Johnson's plan assets at year-end 2007. Again, this value represents the amount for which the pension plan *actually is* funded (as compared to the PBO, which is the amount for which the pension plan *needs to be* funded).

**d) Compare the amount of the expected return on plan assets to the amount of the actual return during 2006 and 2007. Are these differences significant? In your opinion, which return better reflects the economics of the company's pension expense?**

Within the “Change in Plan Assets” reconciliation on page 62, the actual return for 2007 is said to be \$743, while page 61's elaboration on the pension expense components reveals 2007's expected return figure was \$809. (For 2006, the actual was \$966 and the expected, \$701.) These differences are indeed significant – in 2007, the return was overestimated by \$66, and in 2007, it was underestimated by \$265.

(Remember, these figures are in millions!)

Clearly, the market fluctuates, and it is improbable to know whether or not the actual return on plan assets will exceed the expected return for a given year, so I could not really say which return is “better.” I would just have to trust that the actuary’s figures are reasonable, as well as trust in the FASB’s income smoothing technique by which these differences (if in excess of the corridor approach) are amortized into net income rather than placed directly into pension expense all at once.

**e) How much did Johnson & Johnson and their employees contribute to the retirement plan during 2007? How does that compare to the contributions in 2006?**

Page 62 indicates that “Company contributions” to plan assets during 2007 were \$317, and “Plan participant contributions” for the same year totaled \$62. These figures for 2006 are \$259 and \$47, respectively. So, in 2007, contributions from both the employer and its employees increased.

It may seem strange to see *employee* contributions here, since employees do not contribute to defined benefit plans... but as mentioned back at the start of this case in Section 10-1, Johnson & Johnson also has defined contribution plans, which are likely what the employee contributions are applying toward.

**f) What types of investments are in Johnson & Johnson's retirement plan assets? (See page 63.)**

Johnson & Johnson reports its "retirement plan asset allocation at the end of 2007" as consisting of 79 percent investments in equity securities, and 21 percent investments in debt securities, for its U.S. retirement plans. Its international retirement plans consist of a majority of equity and debt securities as well, aside from one percent that is invested in a category titled "real estate and other."

**10-8. Is the company's retirement plan underfunded or overfunded at December 31, 2007? At December 31, 2006? Where does this funded status appear on the company's balance sheet?**

Johnson & Johnson's retirement plan is underfunded at both year-ends: by \$1,533 in 2007, and by \$2,122 in 2006. These figures represent the difference between the year-end balances of the PBO and plan asset accounts. As shown earlier in Figure 10-1, such differences are to be reported on the company's balance sheet, in this case as a pension liability because the plan is underfunded. Johnson & Johnson includes these figures within the line item "Employee related obligations," a long-term liability.

## CASE STUDY 11 – BALANCE SHEET MODEL OF FINANCIAL REPORTING

by  
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April 26, 2019

## **Abstract**

Our penultimate case study assignment had us read an in-depth analysis, published in September 2007 by the Center for Excellence in Accounting & Security Analysis, titled “On the Balance Sheet-Based Model of Financial Reporting.” A major component of the assignment was to thoroughly summarize the article, so I will refrain from going into too much detail in this abstract, but suffice to say that the authors of the article advocate for an income statement-based approach instead of the current balance sheet-based model, naming several critiques of the latter along the way. From our summary, we were then to state how the reading has affected our current thinking, as well as try to explain when we will think about it and how we will use its information in our future careers.

A case like this with absolutely no financial component is a little daunting. If I remember correctly, only two other case studies of our to-be twelve total have been the same way. But then, not everything in accounting is numbers, as I believe I mentioned in the abstracts to those two prior cases. Analysis like that which is done in this case is just as relevant, and necessary for us to develop, skill-wise. It engages some different components of our thinking processes, I feel, and in that way it will prove beneficial to our future careers, given that – again – not everything will be all calculations, all the time. Or so I assume, anyway. It is difficult to know exactly what to expect in the future, of course. In fact, that is what made the third part of this particular assignment the most challenging component! But again, as I said... I think it is good to be engaged in this way.

**11-1. Read and thoroughly summarize the article “On the Balance Sheet-Based Model of Financial Reporting.”**

The article begins its argument by detailing why the authors chose to make the argument at that specific point in time, and the relevant background information. At the time of the article’s publication in 2007, FASB and IASB were meeting to assess and reconsider their conceptual frameworks; the authors indicate that publishing in conjunction with that process would lead to some much-needed debate on the issue at hand. The background section, in turn, thoroughly defines the issue: the idea that the current balance sheet-based model of financial reporting is not well-suited to accurately reflect key metrics (discussed later). In its stead, the authors propose an income statement-based model. Under the former, “the proper valuation of assets and liabilities [is] the primary goal of financial reporting, with the determination of other accounting variables considered secondary and derivative.” However, they argue that “assets and liabilities are in essence the cumulative effect of periodic accruals,” which arise from the revenue recognition and matching principles, which are the foundations of the income statement. Coupled with the fact that the income statement provides information on earnings, which is generally what most investors find most relevant, the authors suggest an income statement-based approach would be more appropriate for today’s environment.

The authors expand on how they arrive at this conclusion via four main critiques of the existing balance sheet model. The first is that “the balance sheet approach is



problematic because it is at odds with how most businesses operate, create value, and are managed.” In other words, the balance sheet is a static representation of a firm’s assets, liabilities, and equity, and moreover the entire foundation of accounting arises solely from the concept of assets. But given that most firms manipulate and divest assets as necessary in order to generate earnings (“asset furnaces”) rather than simply store them, holding assets as their highest priority (“asset greenhouses”), the balance sheet seems out of tune with these firms’ intentions – the firm’s goal is to make a profit, while the balance sheet simply lists what they own instead of what they earn. Put more simply, the balance sheet “is largely silent about the notions of business model and business performance, which are central to a firm’s success and value-creation.” The income statement would present a more accurate reflection of a firm’s operating results.

The second argument is that “the alleged superiority of the balance sheet approach is unclear. If anything, one can argue that the concept of income provides a clearer and stronger foundation for financial reporting.” As noted in the previous paragraph, FASB considers assets to be the main foundation of accounting, and indicates that defining all else – including earnings – can only be done after defining assets. However, the authors note that FASB’s definition of asset includes circular logic in that it seems to “define assets in terms of expected earnings.” Clearly, these concepts are so fundamentally interrelated that it would be impossible to declare one of them superior to the other. Furthermore, the authors argue that, with the growing prevalence of intangible assets and their associated valuation challenges, assets are of increasingly little help in accounting for why a company is profitable.

In their third argument, the authors posit that “balance sheet accounting is likely a major contributor to the substantial temporal decline in the forward-looking usefulness of earnings.” Evidence suggests that “earnings volatility has more than doubled [during the last 40 years], while earnings persistence has fallen,” and the authors trace these results back to “changes in the accounting rather than...changes in the real economy.” In other words, the various provisions of the balance sheet approach, such as “write-offs, ‘one-time’ charges, and other non-recurring items,” is wreaking considerable havoc on the stability of earnings figures. The authors’ fourth argument – that “there are substantial problems with applying the balance sheet-based model of accounting in practice” – builds off of this notion regarding the contrast between “the real economy, where real economic value is created, and the financial markets world [specifically as it applies to fair-value accounting], which makes educated guesses about the values of claims to real economy wealth and trades them.” Here, firm performance and firm valuation are at odds.

The authors close by offering two “suggestions about what a ‘better’ conceptual framework might look like.” First, all operating and financing activities must be made sufficiently distinct from each other in all financial statements. In balance sheet terms, financing activities involve those assets that are “separable from the firm and have value that is largely independent of the firm’s fortunes.” Operating activities, meanwhile, encompass most other assets, i.e. those which “have a primary purpose of supporting and enhancing...within-the-firm activities, and have only limited and peripheral value as independent, free-standing, and marketable stores of value.” In income statement terms, such delineation would result in the elimination of “the hallowed notion of a single ‘bottom-line,’ ” such that the separate components of income would be reflected in their

own figures rather than all lumped together into one. Second and finally, the authors suggest placing a renewed emphasis on the revenue recognition and matching principles, with the given example “if there is a reliable link between R&D expenditures today and revenue for three years ahead, R&D expenditures need to be capitalized and expensed over the next three years. The goal,” they conclude, “is to make the accounting reflect and follow the economic logic of the business as much as possible.”

**11-2. How did reading this article change your current way of thinking?**

While this article brought up many good points and gave me a lot to think about, I cannot necessarily say that it drastically changed my current way of thinking, if only because up to this point I had not been thinking in terms of which financial statement, the balance sheet or the income statement, is “better than” or “superior to” the other. Indeed, I have always thought it clear that the two present different data and thus cater to different audiences based on who is seeking what information about the firm.

The authors clearly push the idea that the income statement is a better indicator of a firm’s earnings than is its balance sheet. I agree; from all of my accounting and finance courses it is very obvious to me that the income statement is a primary source of information for investors, who – the article notes – “primarily think of stock value as arising from the firms’ ability to generate a stream of earnings.” However, I fail to see what is new or innovative about this thought process... after all, I never thought that investors would look for earnings information on the balance sheet. In other words, my opinion all along has been that the two statements report different information. Like the authors, I disagree that one should be “superior” to the other; they should exist in tandem.

One aspect I do not like about the authors' argument is that they proclaim this very fact, yet then seem to contradict it: "The FASB seems to suggest that the two concepts [assets and income] can be divorced and one can be made primary and superior to the other," they write... only to follow that not four sentences later with the declaration, "If anything, one can argue that the concept of income is more fundamental."

My concerns on this contradiction aside, as I said, this article does bring up numerous considerations to which I had not yet given any thought. That fair-value accounting would be at odds with the real economy is one such concept. I have learned that many financial statement users have pushed hard to get fair-value accounting applied to the balance sheet, so the notion that fair-value accounting may not, in fact, be a good measurement is one that struck me as interesting. Similarly, the section of the paper where the authors advocate moving away from the single "bottom-line" number in favor of "separate income subtotals for a company's operating, investing, financing, and tax activities" struck me as interesting as well. Here, it is because I know that many, if not all, income statements already report the line item "income from continuing operations" separate from "net income." Disregarding the other proposed subtotals (considering the argument is largely centered on metrics involving operating performance), is this not what the authors are pushing for? And if so... why would it need to be pushed for, if it already exists? The income statement could maybe be reformatted somewhat, in particular regarding those other subtotals, but if income from continuing operations is already there, then it seems to me that investors ought to be knowledgeable enough to know to look there for operating results rather than assuming net income gives them the best information relevant to what they are seeking.

Whereas I read most of the article under the impression that the authors were simply advocating that the income statement is better than the balance sheet, only when I got to the final critique and read the previously-quoted example regarding the R&D expenses (see Section 11-1) did it finally “click,” and I understood that the authors seem instead to be proposing a complete redefining of how the balance sheet components are calculated. To repeat, the authors in their fourth argument propose a strengthening of the matching principle, with the example that R&D expenditures expected to generate revenues in the upcoming three years should not be expensed in the current period but instead capitalized on the balance sheet as an asset and then expensed over the next three years, such that the expenses would be recognized when the revenues are generated.

Of course, this goes against what I have learned in my classes, but I can understand the theory of this particular example. However, a footnote in Chapter 2 of our Intermediate Accounting textbook by Kieso, Weygandt, and Warfield (which I had turned open to reference after reading the article at hand) questions “the conceptual validity of the matching principle” as applied to examples such as the aforementioned one proposed by the authors of this article: “A major concern is that matching permits companies to defer certain costs and treat them as assets on the balance sheet. In fact, these costs may not have future benefits. If abused, this principle permits the balance sheet to become a ‘dumping ground’ for unmatched costs.”

This argument has merit as well, and reminds me of contingent liabilities, such as those covered in the BP case. Contingent liabilities are a similar concept of creating a balance sheet item for a future event while recognizing an income statement item today. However, in this case, it is a liability that is created instead of an asset, and an expense

that is recognized today rather than revenue. That said, something makes me feel like the authors of this article would be less inclined to support this example of “capitalization,” as it were, than they are their own example of the R&D expenses, even though the projected results – revenues for the R&D example; costs for the contingent liability one – may be just as uncertain in both instances. I get this impression because the authors emphasize a focus on earnings, with less favor for accruals... and I also get the impression that this would then be a case of recognizing contingent gains instead of contingent liabilities, which seems like a complete reversal of everything I have been taught so far. Food for thought... but I digress.

So, to summarize, my current thoughts were not affected too awfully much as a result of reading this article, but only because my current thoughts simply had not reflected a number of the points and issues the article brings up and discusses. Having taken the time to consider their argument, I do have some reservations about several of those issues the authors present, as described previously... but regardless, I now feel like I have a deeper understanding, and opinion, of the topic, such that my prior thinking has expanded beneficially.

**11-3. How will you use this information in your future career? Be thoughtful and creative about the situations you will encounter where this article will affect your beliefs and the way you carry out your future job.**

I think I will mainly use this information by considering it; I have now developed an informed opinion on this topic, and because future accounting changes are certain to

come along, I will have the insights I have gleaned from this article to fall back on and assess those changes against. That said, beyond that intellectual aspect, I am not sure that this article will actually change the exact way I carry out my future job. If there ever happens to be a forum where I am asked to give my input on this exact topic, with the promise that it may result in real changes... besides thinking Dr. D is somehow involved in organizing it just so this one question from a case study I did years ago would come true, sure, I would definitely mention this article and its points of discussion (but remember, I also am at odds with a lot of the authors' arguments, as I tackled previously).

Otherwise, though, obviously whatever GAAP says is what I will go by; the fact trumps the opinion there, so my actions will likely remain unchanged. But as I said, my beliefs have indeed been impacted and, if not altered, at least tested. And I will undoubtedly begin to think of this article whenever any conversations, transactions, or events arise regarding the topics it discusses and the flaws and other issues the authors point out about those. In fact, it will be hard *not* to think of it. For example, some situations would include anything having to do with present value calculations, especially valuation of intangibles, given that the authors argue that such assets "are elusive conceptually and difficult to operationalize in any helpful way" and such calculations are "derivative and conditional rather than fundamental"... fair-value accounting and contingent liabilities, both of which I mentioned earlier in Section 11-2... anything that affects volatility of earnings, both negative (such as the one-time write-offs the authors mention) and positive (such as the income smoothing techniques discussed in the Johnson & Johnson case on defined benefit plans)... and, of course, anything regarding the formatting of the income statement, such as the separate presentation of the income from

continuing operations line item, and why earnings per share info is broken up whenever certain operations are discontinued. Indeed, any time I am considering the formatting of the income statement (or the balance sheet!) is probably going to be the most likely time I think of this article in my future career; figuring out how to present the information such that all financial statement users can clearly find what they are after is, I think, the best way to honor this article in spirit without having to actually undergo the sweeping, let alone controversial, changes that the authors prescribe.



## CASE STUDY 12 – GOOGLE INC.

by  
Nicholas Fenske

May 3, 2019

## **Abstract**

Our final case study assignment involved analysis of Google, Inc.... but not in the typical way. No, instead of analyzing, say, the income statement with a focus on earnings performance, we moved on from the financial accounting aspect into the wider world of a company's information environment, with analysis of how said earnings performance influences a company's – Google's – stock price. In tandem with this assignment, we were provided with a stock price chart for the entire fiscal year to facilitate such comparisons, as well as information on non-GAAP performance metrics, and how and why those are used in practice. In short, this case study allowed us to see how the results produced by the accounting profession influence and are used by an organization's investors and shareholders, and reflect back on the organization itself via its stock price.

At this point, I feel there is not much left to say concerning what I have learned from this, and indeed all other, case(s). Through all of these abstracts thus far, I have been describing what I have learned, in preparation for writing the final, full abstract for the finished thesis as a whole. This case brings to mind some of the same things I have repeated many times already: I am extremely grateful to have had the opportunity to do the sort of analyses which prepare me for the working world and which my classmates who are not in this class did not have; and to have received the many insights those analyses provided. Dr. D implied that this case in particular, by looking beyond the world of accounting into the world of investing, brought all of our work over the past year together full-circle, and then some. I am inclined to agree... and to say thank you.

- 12-1. Read the excerpts of the press release titled “Google Announces Fourth Quarter and Fiscal Year 2013 Results” and review Google’s operating performance reported in the statements of income accompanying the press release.**
- a) The press release includes information about non-GAAP financial measures for the fourth quarter of 2013. Consider the table that reconciles GAAP measures to the non-GAAP measures. What explains the difference between GAAP net income and the non-GAAP equivalent? Do you agree with each of Google’s adjustments in computing non-GAAP earnings? Why or why not?**

The table that reconciles Google’s actual GAAP income from operations, net income, and earnings per share figures to their non-GAAP equivalents indicates that adjustments are made to eliminate from the GAAP figures stock-based compensation expense, restructuring and related charges, income tax effects related to both of those expenses, and net loss from discontinued operations. Ultimately, this results in a fourth quarter non-GAAP income figure of \$4,096 million, as compared to the GAAP number of \$3,376 million. Once again, this \$720 million difference is attributable to the aforementioned components which Google eliminated from the GAAP amounts in arriving at the non-GAAP total.

A supplemental required reading to this case study, “Non-GAAP Performance Measures: Virtue or Vice?” by Allan B. Afterman, discusses the background behind the use of non-GAAP metrics (popular examples are EBIT and EBITDA, among others), current US regulation over such metrics, and pros and cons. One key takeaway regarding why these metrics are used is that “[t]he companies that present non-GAAP performance metrics...believe they provide insight into a company’s core operations beyond one-size-fits-all GAAP and, as such, afford investors a view of a company through management’s eyes.” Indeed, Google indicates in their press release, “Our management believes that these non-GAAP financial measures provide meaningful supplemental information regarding our performance and liquidity by excluding certain expenses and expenditures that may not be indicative of our recurring core business operating results.”

Afterman’s article references a study which “revealed that the most frequent items subtracted from or added to net income to arrive at [a non-GAAP metric] were as follows: stock compensation, asset impairment charges and write-offs, merger and acquisition related costs, restructuring charges, losses on debt extinguishments, changes in fair values of assets and liabilities, and gains or losses on the sales of assets.” Given that Google’s adjustments seem to fall in line with this study, meaning that Google is in good company with many of their fellow US corporations, I see no reason to disagree totally with Google’s adjustments. The net loss from discontinued operations that Google eliminated to arrive at non-GAAP income is not included on Afterman’s list, but I believe it stands to reason that it, too, is a frequently adjusted item; in any case, it makes sense that it would be adjusted, because by definition a discontinued operation can no longer be considered a part of the “core business.”

On the other hand, however, the stock-based compensation expense that Google eliminated is, in fact, considered an operating expense: perhaps, then, eliminating it is not the best idea, regardless of the fact that many others often do so. Moreover, this expense appears to recur, which would go against the idea that those items which are adjusted are – as Google’s own press release suggests – “infrequent in nature.” Indeed, Afterman specifically references Item 10(e) of SEC Regulation S-K, which “expressly prohibits eliminating or smoothing items identified as ‘non-recurring,’ ‘infrequent,’ or ‘unusual’” when such a charge has occurred in the past two years or is likely to occur again in the next two years. In other words, just because an item may be identified as infrequent, does not mean that it occurs infrequently, as seems to be the case with Google’s stock-based compensation expense. So, some evidence does indicate that Google may be skirting the edge somewhat when it comes to abiding by the appropriate rules regarding certain of these adjustments to GAAP income. But taken as a whole, I still feel that I cannot disagree overall with Google’s adjustments – just some key components, instead.

**12-2. Use the attached stock-market charts for Google for the period January 1, 2013, through February 14, 2014, to answer the following questions.**

**a) Compare Google’s fiscal 2013 earnings performance with the movement in Google’s stock price over 2013.**

Neither Google’s press release nor the case study materials supply actual earnings figures for the first three quarters of fiscal 2013, but Google’s net income for the full year totaled \$12,920 million, with \$3,376 million of that belonging to the fourth quarter alone, as already mentioned. Logically, this implies that the first three quarters, then, each had

average earnings of around \$3 billion, just like the fourth quarter. Obviously, this is very positive earnings performance, and Google's price history reflects this. Taken as a whole, the stock price has a significant upward trend throughout 2013, with a significant spike in both price and volume taking place in tandem with Google's Q3 earnings announcement as indicated on the graph. For that matter, all four earnings announcements throughout the year appear to result in an uptick in the stock price, which means investors must have been satisfied by the announcements and Google's performance. This follows, considering that a company's stock price is considered to be the present value of all of its future earnings; as earnings are announced to have increased, the stock price should as well. In fact, the only thing that might cause the stock price to *drop* upon release of an earnings announcement would be unfavorable results, meaning that the company performed poorly for the period, particularly in comparison to analyst expectations. (Based on this metric, one can infer that Google's Q3 earnings may well have been significantly *above* analyst expectations, hence the magnitude of the price jump.)

**b) Compare Google's 2013 stock price performance with the performance of the broader set of firms trading on the NASDAQ exchange (that is, the NASDAQ Index).**

Like Google, the NASDAQ Index also reflects an upward trend throughout 2013, at an approximately similar slope; however, it is clear from the chart that Google's cumulative stock return is, as a whole, significantly higher than that of the NASDAQ Index for much of the year. Viewed more locally, in late January, Google's return actually dips below the NASDAQ Index, and for the periods of April-May and August-

mid-October, Google either falls close to or at the same level as the NASDAQ Index... but with the aforementioned surge in Google's stock price following the Q3 earnings announcement, Google noticeably outpaces the NASDAQ Index, continuing to rise considerably above the latter from that point in mid-October all the way through to the beginning of the next year. This may be attributable to the fact that the NASDAQ Index is a composite, and therefore an average, of other firms' stocks, but also likely points to the positive earnings performance of Google as compared to others.

**c) Based on the stock market chart, did the market perceive the earnings news in Google's press release dated January 30, 2014, as "good news" or "bad news"? *Note: the press release was made available after the close of trading for the day.***

Again, as stated earlier, Google's stock price went up following all four quarters' respective earnings announcements, meaning that investors must indeed have found the news to be "good news" each time. While the Q4 press release did not elicit a rise as substantial as the Q3 earnings announcement, based on Yahoo! Finance's historical stock price tracker Google's stock price rose from \$564.03 on January 30, 2014, to \$586.67 on January 31, 2014, with the volume on both days in the double-digit millions, whereas the only other days throughout the entire previous year that reached that same volume status (all other days featuring only single-digit million volume figures) were April 19, July 19, and October 18, 2013 – no doubt the days of the Q1, Q2, and Q3 earnings announcements, respectively. In particular, the fact that the price and volume increased on January 30 *prior* to the press release being issued (seeing as how it was made

available only after trading had closed that day) likely indicates that investors and analysts were already expecting and projecting positive results (and trading accordingly), results which the press release evidently confirmed if not exceeded. (It is worth noting, though, that another notable occurrence on January 30, as referenced in the *WSJ* article discussed in the next section, was Google's announcement that it would "sell its unprofitable Motorola smartphone unit to Lenovo Group Inc. for \$2.9 billion.")

**12-3. Read the *Wall Street Journal* article from January 30, 2014, titled "Google Reports Higher Profit."**

- a) According to the article, how did Google's fourth quarter revenue and earnings compare to the consensus analyst forecasts at the time of the earnings press release? Are these relations consistent with the positive stock market reaction following the press release?**

"Revenue of \$16.9 billion was slightly higher than the \$16.8 billion analysts had been projecting for the period," the article reports, but non-GAAP earnings were only "\$12.01 a share; analysts on that basis had predicted \$12.20 a share." In other words, revenue exceeded analyst forecasts (if only slightly), while earnings actually fell below analyst expectations. Normally, performance that does not live up to expectations might see a stock price drop, yet nevertheless Google's stock price rose following this news. Given that the differences are not all that significant, the stock market reaction can still reasonably be said to be consistent with these relations between actual and forecasted results. However, it is likely other factors contributed to the positive reaction as well...



**b) What other factors does the article discuss that might contribute to the market's positive reaction to the earnings press release? Are there any factors that might cause investors to be concerned about Google's recent performance?**

Some such factors contributing to the positive reaction are “app sales via the Google Play store on Android smartphones,” the aforementioned sale of Motorola to Lenovo, an expansion of capital expenditures for computers and data centers, continued hiring “at a rapid clip,” and – most notably – “strong revenue growth...in Google's core advertising business.” With this growth, the article notes, “Google continued to beat back concerns that the shift in Internet usage to mobile devices from desktop computers would harm its lucrative search business.” However, the article also emphasizes that this particular factor does indeed remain a cause for investor concern: despite a 31 percent increase in the *number* of “clicks on the company's search advertisements” during Q4 2013, the actual *amount received* for each click continued to decline. That said, though, it was apparent that for the time being, “most investors are sanguine about the shift to mobile, despite the fact that Google's link-based ads don't always translate well from desktop computers to smaller smartphone screens.” The article indicates that Google, at the time, was working toward improving its performance in that area, but undoubtedly such improvements would become closely monitored by investors, lest continued declines begin to affect Google's earnings performance and, therefore, its stock price.

## Bibliography

- “2018 Federal Tax Rates, Personal Exemptions, & Standard Deductions.” *US Tax Center*, 16 Oct. 2018, [www.irs.com/articles/2018-federal-tax-rates-personal-exemptions-and-standard-deductions](http://www.irs.com/articles/2018-federal-tax-rates-personal-exemptions-and-standard-deductions).
- “A Buyer’s Guide to Strategic Analytics: Five Critical Criteria for Analytics Success.” *Alteryx*, Oct. 2012, [tdwi.org/~media/0511F6A377104AAB8D98435B18941201.ashx](http://tdwi.org/~media/0511F6A377104AAB8D98435B18941201.ashx). PDF. Accessed 29 Aug. 2018.
- Aiello, Julie, et al. “The Best Nashville Neighborhoods for Young Professionals.” *Zumper*, 6 Nov. 2017, [www.zumper.com/blog/2017/11/the-best-nashville-neighborhoods-for-young-professionals/](http://www.zumper.com/blog/2017/11/the-best-nashville-neighborhoods-for-young-professionals/).
- “Alteryx Reviews: Overview, Pricing, and Features.” *FinancesOnline*, [reviews.financesonline.com/p/alteryx/](http://reviews.financesonline.com/p/alteryx/). Accessed 29 Aug. 2018.
- “Average Gas Prices in Tennessee.” *Gas Buddy*, [www.gasbuddy.com/USA/TN](http://www.gasbuddy.com/USA/TN).
- “Bank Accounting Advisory Series.” *Office of the Comptroller of the Currency*, Aug. 2018, [occ.treas.gov/publications/publications-by-type/other-publications-reports/baas.pdf](http://occ.treas.gov/publications/publications-by-type/other-publications-reports/baas.pdf). PDF. Accessed 28 Sept. 2018.
- “Best Hospitals in Tennessee.” *U.S. News & World Report*, [health.usnews.com/best-hospitals/area/tn](http://health.usnews.com/best-hospitals/area/tn).

Black, Ken. “How and Why Alteryx and Tableau Allow Me to Innovate – Part 2.”

*3danim8*, 12 June 2015, [3danim8.wordpress.com/2014/11/17/how-and-why-alteryx-and-tableau-allow-me-to-innovate-part-2/](http://3danim8.wordpress.com/2014/11/17/how-and-why-alteryx-and-tableau-allow-me-to-innovate-part-2/). Accessed 29 Aug. 2018.

“Cherry Creek.” *ApartmentList*, [www.apartmentlist.com/tn/nashville/cherry-creek](http://www.apartmentlist.com/tn/nashville/cherry-creek).

“Contingencies: Key Differences between U.S. GAAP and IFRS.” *Deloitte IAS Plus*, 22

Apr. 2015, [www.iasplus.com/en-us/standards/ifrs-usgaap/contingencies](http://www.iasplus.com/en-us/standards/ifrs-usgaap/contingencies). Accessed 28 Mar. 2019.

“Davidson County, Tennessee Population 2018.” *World Population Review*,

[worldpopulationreview.com/us-counties/tn/davidson-county-population/](http://worldpopulationreview.com/us-counties/tn/davidson-county-population/).

“Everything You Need to Know About Payroll Taxes in 2018.” *Square*,

[squareup.com/townsquare/payroll-taxes-defined](http://squareup.com/townsquare/payroll-taxes-defined).

Fay, Bill. “Types of Taxes – Income, Property, Goods, Services, Federal, State.”

*Debt.org*, [www.debt.org/tax/type/](http://www.debt.org/tax/type/).

“Frequently Asked Questions on the New Accounting Standard on Financial Instruments

– Credit Losses.” *Board of Governors of the Federal Reserve System*, 6 Sept.

2017, [federalreserve.gov/supervisionreg/topics/faq-new-accounting-standards-on-financial-instruments-credit-losses.htm](http://federalreserve.gov/supervisionreg/topics/faq-new-accounting-standards-on-financial-instruments-credit-losses.htm). Accessed 28 Sept. 2018.

Goguen, David. “BP Oil Spill Lawsuits and Legal Issues.” *Nolo*, 31 Dec. 2015,

[www.nolo.com/legal-encyclopedia/bp-oil-spill-lawsuits-legal-33442.html](http://www.nolo.com/legal-encyclopedia/bp-oil-spill-lawsuits-legal-33442.html).

Accessed 28 Mar. 2019.

- Graziosi, Patrick. "Violent Crimes and Burglaries Decrease in Memphis." *The Commercial Appeal*, 26 July 2018, [www.commercialappeal.com/story/news/crime/2018/07/26/violent-crimes-and-burglaries-decrease-memphis/841590002/](http://www.commercialappeal.com/story/news/crime/2018/07/26/violent-crimes-and-burglaries-decrease-memphis/841590002/).
- McKenna, Francine. "How an Auditor's Comment Suggests Continued Uncertainty over BP Spill Costs." *MarketWatch*, 4 Aug. 2015, [www.marketwatch.com/story/how-an-auditors-comment-suggests-continued-uncertainty-over-bp-spill-costs-2015-08-04](http://www.marketwatch.com/story/how-an-auditors-comment-suggests-continued-uncertainty-over-bp-spill-costs-2015-08-04). Accessed 28 Mar. 2019.
- "Memphis: Economy." *City-Data*, [www.city-data.com/us-cities/The-South/Memphis-Economy.html](http://www.city-data.com/us-cities/The-South/Memphis-Economy.html).
- "Memphis: Geography and Climate." *City-Data*, [www.city-data.com/us-cities/The-South/Memphis-Geography-and-Climate.html](http://www.city-data.com/us-cities/The-South/Memphis-Geography-and-Climate.html).
- "Memphis, Tennessee - City Information, Fast Facts, Schools, Colleges, and More." *City Town Info*, [www.citytowninfo.com/places/tennessee/memphis](http://www.citytowninfo.com/places/tennessee/memphis).
- Miller, Faye. "Impairment and Sale Considerations for Debt Securities." *RSM*, [rsmus.com/what-we-do/services/assurance/impairment-and-sale-considerations-for-debt-securities.html](http://rsmus.com/what-we-do/services/assurance/impairment-and-sale-considerations-for-debt-securities.html). Accessed 28 Sept. 2018.
- "Most Scenic Views in Nashville." *Trusted Tours Travel Blog*, 18 Jan. 2018, [guide.trustedtours.com/scenic-views-nashville](http://guide.trustedtours.com/scenic-views-nashville).
- "Nashville: Economy." *City-Data*, [www.city-data.com/us-cities/The-South/Nashville-Economy.html](http://www.city-data.com/us-cities/The-South/Nashville-Economy.html).

“Nashville: Geography and Climate.” *City-Data*, [www.city-data.com/us-cities/The-South/Nashville-Geography-and-Climate.html](http://www.city-data.com/us-cities/The-South/Nashville-Geography-and-Climate.html).

“Nashville, Tennessee - City Information, Fast Facts, Schools, Colleges, and More.” *City Town Info*, [www.citytowninfo.com/places/tennessee/nashville](http://www.citytowninfo.com/places/tennessee/nashville).

“Nashville, Tennessee Crime Rate and Safety” *U.S. News & World Report*, [realestate.usnews.com/places/tennessee/nashville/crime](http://realestate.usnews.com/places/tennessee/nashville/crime).

“Nashville, Tennessee Population 2018.” *World Population Review*, [worldpopulationreview.com/us-cities/nashville-population/](http://worldpopulationreview.com/us-cities/nashville-population/).

“North Creek Apartments.” *ApartmentList*, [www.apartmentlist.com/ms/southaven/north-creek-apartments--1](http://www.apartmentlist.com/ms/southaven/north-creek-apartments--1).

“One MetroCenter.” *ApartmentList*, [www.apartmentlist.com/tn/nashville/one-metrocenter](http://www.apartmentlist.com/tn/nashville/one-metrocenter).

Pinchon, Frederic. “Overcome 10 Excel Limitations with Alteryx.” *Insights Through Data*, 14 Apr. 2016, [insightsthroughdata.com/overcome-10-excel-limitations-with-alteryx/](http://insightsthroughdata.com/overcome-10-excel-limitations-with-alteryx/). Accessed 29 Aug. 2018.

“Real Property Tax.” *Nashville Trustee*, [www.nashville.gov/Trustee/Real-Property-Taxes.aspx](http://www.nashville.gov/Trustee/Real-Property-Taxes.aspx).

Reicher, Mike, and Natalie Allison. “Violent Crime on the Rise as Nashville Grows, but East Nashville Bucks the Trend.” *The Tennessean*, 22 Aug. 2018, [www.tennessean.com/story/news/2018/08/22/nashville-crime-shootings-cobra-bar/1050883002/](http://www.tennessean.com/story/news/2018/08/22/nashville-crime-shootings-cobra-bar/1050883002/).

Reifer, Abie. "Alteryx Analytics Tools Help Simplify Advanced Data Analysis."

*SearchBusinessAnalytics*, TechTarget, June 2017, [searchbusinessanalytics.](https://searchbusinessanalytics.techtarget.com/feature/Alteryx-advanced-analytics-tools-simplify-data-analysis)

[techtarget.com/feature/Alteryx-advanced-analytics-tools-simplify-data-analysis](https://searchbusinessanalytics.techtarget.com/feature/Alteryx-advanced-analytics-tools-simplify-data-analysis).

Accessed 29 Aug. 2018.

"Shelby County, Tennessee Population 2018." *World Population Review*,

[worldpopulationreview.com/us-counties/tn/shelby-county-population/](https://worldpopulationreview.com/us-counties/tn/shelby-county-population/).

"Tax Structure." *Greater Memphis Chamber*, [memphischamber.com/select-memphis/tax-](https://memphischamber.com/select-memphis/tax-structure/)

[structure/](https://memphischamber.com/select-memphis/tax-structure/).

"Technical Line: A Closer Look at the New Credit Impairment Standard." *Ernst &*

*Young*, No. 2016-24, 12 Oct. 2016, [ey.com/Publication/vwLUAssets/Technical](https://ey.com/Publication/vwLUAssets/TechnicalLine_03320-161US_Impairment_12October2016/$FILE/TechnicalLine_03320-161US_Impairment_12October2016.pdf)

[Line\\_03320-161US\\_Impairment\\_12October2016/\\$FILE/TechnicalLine\\_03320-](https://ey.com/Publication/vwLUAssets/TechnicalLine_03320-161US_Impairment_12October2016/$FILE/TechnicalLine_03320-161US_Impairment_12October2016.pdf)

[161US\\_Impairment\\_12October2016.pdf](https://ey.com/Publication/vwLUAssets/TechnicalLine_03320-161US_Impairment_12October2016/$FILE/TechnicalLine_03320-161US_Impairment_12October2016.pdf). PDF. Accessed 27 Sept. 2018.

"The Retreat at Germantown." *ApartmentList*, [www.apartmentlist.com/tn/germantown/](https://www.apartmentlist.com/tn/germantown/the-retreat-at-germantown--2)

[the-retreat-at-germantown--2](https://www.apartmentlist.com/tn/germantown/the-retreat-at-germantown--2).

"What is Alteryx?" *Alooma*, 1 Jan. 2018, [alooma.com/answers/what-is-alteryx](https://alooma.com/answers/what-is-alteryx).

Accessed 29 Aug. 2018.

"Where Does Tennessee Place in the U.S. News Best States Rankings?" *U.S. News &*

*World Report*, [www.usnews.com/news/best-states/tennessee](https://www.usnews.com/news/best-states/tennessee).

### **The Honor Code**

On my honor, I pledge that I have neither given, received, nor witnessed any unauthorized help on this thesis.

Signed Nicholas Fenske